UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 6

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EPA REGION VI

	§	CERCLA Docket No. 06-13-12
	§	
In the Matter of:	§	Administrative Settlement Agreement and
	§	Order on Consent for Early Design Actions
	§	
	§	CERCLA Docket No.
Chevron Mining Inc.,	§	
	§	
Respondent.	§	Proceeding under CERCLA §§ 104, 106,
	§	107, 122

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I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent for Early Design Actions (Agreement) is entered into voluntarily by the United States Environmental Protection Agency (EPA) and Chevron Mining Inc. (CMI or Respondent). This Agreement provides that Respondent shall undertake Early Design Actions, including various procedures and technical analyses, to produce a detailed set of plans and specifications for implementation of portions of the Remedial Action selected in EPA's Record of Decision for the Chevron Questa Mine site (Site) located in Taos County, New Mexico. Respondent shall implement some design plans and specifications as pilot studies. In addition, Respondent shall reimburse the United States for certain response costs incurred in connection with this Agreement.

2. This Agreement is entered into pursuant to the authority vested in the President of the United States by sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. §§ 9604, 9606(a), 9607, 9622. This authority was delegated to the EPA Administrator by Executive Order 12580 (52 Fed. Reg. 2923, Jan. 29, 1987); further delegated to EPA Regional Administrators by EPA Delegation No. 14-14-C; and redelegated by the Regional Administrator to the Director, Superfund Division, by EPA Delegation No. R6-14-14-C (August 4, 1995).

3. In accordance with the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 (NCP), EPA has notified the State of New Mexico (State) of negotiations with potentially responsible parties regarding the implementation of the early design

actions for the Site, and has provided the State with an opportunity to participate in such negotiations and be a party to this Agreement.

4. The objectives of EPA and Respondent in entering into this Agreement are to protect public health or welfare or the environment at the Site by the early design of certain response actions and implementation of design pilot studies at the Site by Respondent, to reimburse certain response costs of EPA, and to resolve the claims of EPA against Respondent as provided in this Agreement.

5. EPA and Respondent recognize that this Agreement has been negotiated in good faith and that entry into this Agreement and the actions undertaken by Respondent in accordance with this Agreement do not constitute and shall not be considered an admission of liability under CERCLA § 107 or any other federal or State law. Respondent does not acknowledge that the release or threatened release of hazardous substances at or from the Site constitutes an imminent and substantial endangerment to public health or welfare or the environment. Respondent does not admit and retains the right to controvert in any subsequent proceedings, other than proceedings to implement or enforce this Agreement, the validity of the findings of facts, conclusions of law and determinations in Sections IV and V of this Agreement. Respondent agrees to comply with and be bound by the terms of this Agreement and further agrees that it will not contest the validity of this Agreement or its terms.

II. PARTIES BOUND

6. This Agreement applies to and is binding upon EPA and Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent's

responsibilities under this Agreement. The signatories to this Agreement certify that they are authorized to execute and legally bind the parties they represent.

7. Respondent shall ensure that its agents, contractors, subcontractors and representatives receive a copy of this Agreement and comply with its terms and conditions. Respondent shall be responsible for any noncompliance with this Agreement.

III. DEFINITIONS

8. Unless otherwise expressly provided in this Agreement, the words, phrases and terms appearing in this Agreement which are defined in CERCLA or CERCLA regulations shall have their statutory or regulatory meaning. Whenever the terms listed below are used in this Agreement or the attached appendices, the following definitions shall apply, solely for the purposes of this Agreement:

a. "Agreement" shall mean this Administrative Settlement Agreement and Order on Consent for Early Design Actions and all appendices and attachments to this document. In the event of a conflict between this document and an appendix or attachment, this document shall control.

b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601 to 9675.

c. "Chevron Questa Mine Early Design Actions Special Account" shall mean the Special Account within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to CERCLA § 122(b)(3), 42 U.S.C. § 9622(b)(3).

d. "CMI Property" shall mean the areas within the yellow property lines depicted by Figures 1-2 and 1-3 of Attachments 2 and 3, respectively, to the Statement of Work (SOW) attached hereto as Appendix A and incorporated herein by reference.

e. "Day" shall mean a calendar day unless expressly stated to be a working day. The term "working day" shall mean a day other than a Saturday, Sunday or federal or State holiday. In computing any period of time under this Agreement, where the last day would fall on a Saturday, Sunday or federal or State holiday, the period shall run until the close of business on the next working day.

f. "Document" shall mean any object that records, stores, contains or presents information and includes writings of any kind, formal or informal, whether wholly or partially handwritten and whether created or maintained in paper or electronic form.

g. "Early Design Actions" shall mean all activities Respondent is required to perform under this Agreement, excluding the activities required under Section XII (Record Retention).

h. "Effective Date" shall mean October 19th, 2012.

i. "EPA" shall mean the United States Environmental Protection Agency and any successor departments, agencies or instrumentalities.

j. "Future Oversight Costs" shall mean that portion of Future Response Costs that EPA incurs in monitoring and supervising Respondent's performance of the Work to determine whether such performance is consistent with the requirements of this Agreement, including costs incurred in reviewing plans, reports and other deliverables submitted pursuant to this Agreement, as well as costs incurred in overseeing implementation of the Work. Future Oversight Costs do not include, *inter alia*, costs incurred by EPA pursuant to Paragraph 39(e), Section X (Access to the Site and Other Property), Section XIV (Emergency Response and Notification of Releases), or the costs incurred by EPA in enforcing the terms of this Agreement, including all costs

incurred in connection with Dispute Resolution pursuant to Section XVI (Dispute Resolution) and all litigation costs.

k. "Future Response Costs" shall mean all costs incurred by EPA in implementing this Agreement, including, but not limited to, the costs of (1) overseeing the implementation of the Work and other activities to be performed under this Agreement, (2) participating in work groups formed under this Agreement, including the Technical Working Group (TWG), (3) collecting and analyzing samples, including split samples, (4) reviewing, developing and revising plans, reports, notices and other Documents submitted to EPA under this Agreement, (5) enforcing this Agreement, (6) obtaining or assisting in obtaining access to the Site or other property under Section X (Access to the Site and Other Property), including any just compensation paid for such access, (7) responding to emergencies under Section XIV (Emergency Response and Notification of Releases), (8) implementing the Work under Paragraph 84 (Work Takeover) if such costs are not covered by Section XXVI (Financial Assurance), and (9) furthering community participation and community relations. "Future Response Costs" also includes, without limitation, payroll costs, contractor costs, travel costs, laboratory costs, attorney's fees and other legal costs, overhead and other indirect costs and interest incurred by EPA under this Agreement.

l. "Group 1 Waste Rock Pile" shall mean the Mine Site Area waste rock pile described in Section 6.7 of the SOW for pilot implementation of large-scale rock pile design and remediation techniques, particularly with respect to cover placement, revegetation, and monitoring.

m. "Health and Safety Plan" or "HASP" shall mean the Health and Safety Plan required by Section 6.2.8 of the SOW.

n. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

o. "Mine Site Area" shall mean the area within the yellow boundary lines as depicted by Figure 1-2 and designated as the "Questa Mine Site" in Attachment 2 to Appendix A.

p. "Mining Act" shall mean the New Mexico Mining Act, NMSA 1978, §§ 69-36-1 to 69-36-20.

q. "Mining Facility" shall mean the underground mine workings, milling facility, tailing pipeline and tailing disposal impoundments at the tailing facility.

r. "MMD" shall mean the Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department and any successor departments, agencies or instrumentalities.

s. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to CERCLA § 105, 42 U.S.C. § 9605, and codified at 40 C.F.R. Part 300.

t. "NMED" shall mean the New Mexico Environment Department and any successor departments, agencies or instrumentalities.

u. "O & M" shall mean operation and maintenance.

v. "Paragraph" shall mean a portion of this Agreement identified by an Arabic numeral or an upper or lower case letter.

w. "Parties" shall mean EPA and CMI.

x. "Performance Standards" shall mean the cleanup standards and other measures of achievement of the goals of the Selected Remedy set forth in the ROD and Section 5.0 of the SOW and any modified standards established by EPA as a result of Work under this Agreement and consistent with CERCLA and the NCP.

y. "Record of Decision" and "ROD" shall mean the EPA Record of Decision relating to the Site issued on December 20, 2010, and all attachments thereto.

z. "Respondent" or "CMI" shall mean Chevron Mining Inc.

aa. "Respondent's Project Coordinator or designee" shall mean the principal contact for CMI to supervise and direct implementation of the Work under this Agreement.

bb. "Section" shall mean a part of this Agreement identified by a Roman numeral.

cc. "Site" shall mean the Chevron Questa Mine Superfund Site, located in Taos County, New Mexico. The Site consists of a molybdenum mine and milling facility located approximately four miles east of the Village of Questa on approximately three square miles of land owned and operated by CMI (lat. 36°41' 54" N., long. 105°30' 18" W). The mine includes underground mine workings, an historic open pit, nine waste rock dumps or piles surrounding the open pit and a subsidence area which represents a surface-collapse feature above the ore extraction area. The Site also includes a tailing pipeline running parallel to State Highway 38, the area in the vicinity of the pipeline and the Tailing Facility in the Village of Questa (lat. 36°42' 13" N., long. 105°36' 40" W. and lat. 36°42' 08" N., long. 105°37' 54" W.). The Site also includes all other areas where any hazardous substance, pollutant or contaminant from the Molycorp, Inc. (or successor) mining, milling and tailing disposal operations is located.

dd. "Spring Gulch Waste Rock Pile" shall mean the waste rock pile which will be assessed for suitability as a borrow source for cover material pursuant to the ROD and Section 6.5 of the SOW. Spring Gulch Waste Rock Pile is depicted in Figure 1-2 and designated as the "Spring Gulch Rock Pile" in Attachment 2 to Appendix A.

ee. "Special Account" shall mean the Chevron Questa Mine Early Design Actions Special Account.

ff. "State" shall mean the State of New Mexico.

gg. "Statement of Work" and "SOW" shall mean the Statement of Work for Early Design Actions attached as Appendix A and any modifications made in accordance with this Agreement.

hh. "SWDA" shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901- 6992k.

ii. "Tailing Facility" shall mean the area within the yellow boundary lines depicted in Figure 1-3 and designated as the "Questa Tailing Facility" in Attachment 3 to Appendix A.

jj. "Transfer" shall mean to sell, assign, convey, lease, mortgage or grant a security interest in or, where used as a noun, a sale, assignment, conveyance or other disposition of any interest by operation of law or otherwise.

kk. "TWG" shall mean the Technical Working Group described in Sections 4.4 and 6.6 of the SOW.

ll. "Waste Material" shall mean a "hazardous substance" as defined by CERCLA § 101(14), 42 U.S.C. § 9601(14), a pollutant or contaminant as defined by CERCLA § 101(33), 42 U.S.C. § 9601(33), and a "solid waste" as defined by SWDA § 1004(27), 42 U.S.C. § 6903(27).

mm. "Work" shall mean all activities Respondent is required to perform under this Agreement, except those activities required under Section XII (Record Retention).

nn. "WQA" shall mean the New Mexico Water Quality Act, NMSA 1978 §§ 74-6-1 to 74-6-17.

IV. FINDINGS OF FACT

9. Respondent Chevron Mining Inc. is a Missouri corporation and an indirect, wholly-owned subsidiary of Chevron Corporation.

10. From 1919 to August 31, 2007, Molycorp, Inc. owned and operated a molybdenum mine on what is now the CMI Property. Underground mining operations were conducted from 1919 to 1958, resumed in 1981, and continue through today. After molybdenum is extracted at the milling facility located at the Mine Site Area, the spent tailing is transported to the Tailing Facility where it is stored in tailing impoundments. In addition to the underground mining operations, an open pit was developed in 1965. During open pit mining operations, approximately 328 million tons of acid-generating waste rock were excavated and deposited in nine large waste rock piles surrounding the open pit.

11. On August 31, 2007, Respondent acquired Molycorp, Inc., by merger and became the owner of the CMI Property and operator of the Mining Facility.

12. The Mine Site Area, Mill Area and Tailing Facility Area are located on CMI Property and have been so located during Respondent's ownership of the CMI Property and Respondent's operation of the mining facility.

13. Respondent conducted a Remedial Investigation/Feasibility Study (RI/FS) at the Site pursuant to an Administrative Order on Consent for RI/FS, dated September 2001. EPA conducted a baseline human health risk assessment and baseline ecological risk assessment for the Site concurrently with Respondent's RI/FS.

14. As part of the EPA-approved RI and EPA risk assessments, sampling and analysis were performed of soil, sediment, surface water, ground water and terrestrial and aquatic biota at the Site.

15. Based on the findings of the RI, mining operations conducted prior to and during Respondent's ownership of the CMI Property and operation of the Mining Facility have resulted in the release of hazardous substances, as defined by CERCLA § 101(14), 42 U.S.C. § 9601(14), on and from the CMI Property to soil, sediment, ground water or surface water, including surface water of the Red River and Eagle Rock Lake. Such hazardous substances include polychlorinated biphenyls (PCBs), arsenic, cadmium, copper, zinc and sulfuric acid.

16. The actual and potential releases on and from the CMI Property to soil, sediment, ground water or surface water prior to and during Respondent's ownership of the CMI Property and operation of the Mining Facility include uncontrolled storm water run-off, acid rock drainage, seepage from tailing impoundments, and tailing spills from breaks in the tailing pipeline along the Red River riparian corridor.

V. CONCLUSIONS OF LAW

17. Based on the Findings of Fact set forth above and the Administrative Record supporting the Early Design Actions, EPA has determined that:

a. The Site is a "facility" as defined by CERCLA § 101(9), 42 U.S.C. § 9601(9).

b. The contamination at the Site, as identified in the Findings of Fact, includes "hazardous substances" as defined by CERCLA § 101(14), 42 U.S.C. § 9601(14).

c. Respondent is a "person" as defined by CERCLA § 101(21), 42 U.S.C. § 9601(21).

d. Respondent is a responsible party under CERCLA § 107(a), 42 U.S.C. § 9607(a), and is liable for the performance of a response action and for response costs incurred and to be incurred at the Site.

e. The conditions described in the Findings of Fact constitute an actual or threatened "release" of a hazardous substance from the facility as defined by CERCLA § 101(22), 42 U.S.C. § 9601(22).

VI. SETTLEMENT AGREEMENT AND ORDER

18. Based upon the foregoing Findings of Fact, Conclusions of Law and the Administrative Record for the Site, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Agreement, including all attachments to this Agreement and all documents incorporated by reference into this Agreement.

VII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

19. Within 10 days after the Effective Date, Respondent shall notify EPA in writing of the names and qualifications of the contractors and subcontractors which Respondent proposes to retain to perform the Work. EPA may disapprove a proposed contractor or subcontractor or issue an authorization to proceed and shall so notify Respondent in writing within five days of receiving Respondent's notice. In the event of a disapproval, Respondent shall retain a different contractor or subcontractor and notify EPA in writing of the name of the contractor or subcontractor within 30 days after Respondent's receipt of EPA's disapproval notice.

20. The proposed contractors must demonstrate compliance with ANSI/ASQC E-4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP

must be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B0-1/002) or equivalent documentation as required by EPA. Proposed subcontractors can work under the hiring contractors' QMP and do not have to have an individual QMP.

21. Within five days after the Effective Date, Respondent shall designate a Project Coordinator who shall be responsible for the administration of all actions by Respondent required by this Agreement and shall submit the Project Coordinator's name, address, telephone number and qualifications to EPA in writing. To the greatest extent possible, the Project Coordinator shall be present on-Site or readily available during on-Site work. If EPA disapproves of the Project Coordinator, Respondent shall propose a different Project Coordinator and shall notify EPA of that person's name, address, telephone number and qualifications within 21 days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Agreement shall constitute receipt by Respondent.

22. EPA has designated Gary Baumgarten of the Region 6 Superfund Remedial Branch as its Project Coordinator. Except as otherwise provided in this Agreement, Respondent shall direct all submissions to EPA required by this Agreement to the EPA Project Coordinator at the U.S. Environmental Protection Agency, 1445 Ross Avenue (6SF-RA), Dallas, Texas 75202-2733.

23. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and On-Scene Coordinator (OSC) by the NCP. EPA's Project Coordinator shall have the authority, consistent with the NCP, to stop any Work required by this Agreement and take any necessary response action when the Project Coordinator determines that

conditions at the Site may present an immediate endangerment to public health, welfare or the environment. The absence of the EPA Project Coordinator from the area under study pursuant to this Agreement shall not be cause for the stoppage or delay of Work.

24. NMED has designated Joe Fox as its Project Coordinator. MMD has designated Joe Vinson as its Project Coordinator.

25. EPA, NMED, MMD and Respondent shall have the right, subject to Paragraph 21, to change their respective designated Project Coordinators. Respondent shall notify EPA 30 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notice.

VIII. PERFORMANCE OF THE WORK

26. Respondent shall perform all actions necessary to implement the SOW as provided in the SOW. The actions to be implemented are described in detail in Section 6 of the SOW. The SOW calls for six Early Design Actions:

a. a pre-design Tailing Facility area ground water investigation,

b. pre-design support investigations for upgrading seepage barrier and well extraction systems,

c. pre-design borrow characterization of Spring Gulch Waste Rock,

d. development and assessment of remedial design options for waste rock piles,

e. pilot project for Group 1 Waste Rock Pile, and

f. a pre-design treatability study for water treatment. (By performing the water treatment treatability study Work in this SOW, Respondent does not waive, and specifically reserves, Respondent's right to contest the need for and timing of implementation of ground water treatment.)

27. Respondent shall prepare and implement several Work Plans as required by Section 6 of the SOW. Each Work Plan shall include plans and schedules for implementation of all pre-design tasks identified in the SOW. Except as otherwise agreed to in writing by EPA, before implementing any Work Plan, Respondent shall submit the Health and Safety Plan required by Section 6.2.8 of the SOW, gain EPA approval of the Overall Site Plan required by Section 6.2.7 of the SOW, and gain EPA approval of the relevant work plan. Respondent shall submit to EPA and the State all plans, submittals, and other deliverables required under each approved Work Plan in accordance with the approved schedule for review. Unless otherwise agreed to in writing by EPA, Respondent shall not commence further Early Design activities at the Site prior to approval of the relevant Work Plan.

28. Respondent shall conduct all work in accordance with the SOW, the ROD, CERCLA, the NCP, and all applicable EPA guidance. The Project Coordinator shall use his or her best efforts to inform Respondent if new or revised guidance may apply to the Work.

29. Respondent shall perform the tasks and submit the deliverables that the SOW sets forth. EPA will approve, approve with conditions, modify, or disapprove each deliverable that Respondent submits under this Agreement and the SOW, pursuant to Section IX (EPA Approval of Plans and Other Submissions). Each deliverable must include all listed items as well as items that the Work Plans indicate Respondent shall prepare and submit to EPA for review and approval.

30. Upon EPA's approval, this Agreement incorporates any reports, plans, specifications, schedules, and attachments that this Agreement or the SOW requires. With the exception of extensions that EPA allows in writing or certain provisions within Section XVII of this Agreement (*Force Majeure*), any non-compliance with such EPA-approved reports, plans,

specifications, schedules, and attachments shall be considered a violation of this Agreement and will subject Respondent to stipulated penalties in accordance with Section XVIII of this Agreement (Stipulated Penalties).

31. If any unanticipated or changed circumstances exist at the Site that may significantly affect the Work or schedule, Respondent shall notify the EPA Project Coordinator by telephone within 24 hours of when Respondent becomes aware that such circumstances may significantly affect the Work or schedule. Such notification is in addition to any notification required by Section XVII (*Force Majeure*).

32. If EPA determines that additional tasks beyond those in the approved work plans, including, but not limited to, additional investigatory work or engineering evaluation, are necessary to accomplish the objectives of the Early Design Actions set forth in Sections 4.1, 4.2, 4.3, 4.5, and 4.6 of the SOW, and such additional tasks are consistent with the scope of the Early Design Actions described in these sections of the SOW and, as applicable, in the ROD, EPA shall notify Respondent in writing. Respondent shall submit a work plan to EPA for the completion of such additional tasks within 30 days of receipt of such notice, or such longer time as EPA agrees. The work plan shall be completed in accordance with the same standards, specifications, and requirements of other deliverables pursuant to this Agreement. EPA will review and comment on, as well as approve, approve with conditions, modify, or disapprove the work plan pursuant to Section IX (EPA Approval of Plans and Other Submissions). Upon approval or approval with modifications of the work plan, Respondent shall implement the additional work in accordance with the schedule of the approved work plan. Failure to comply with this Paragraph, including, but not limited to, failure to submit a satisfactory work plan, shall subject Respondent to stipulated penalties as set forth in Section XVIII (Stipulated Penalties).

33. Quality Assurance and Sampling.

a. All sampling and analyses performed pursuant to this Agreement shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analysis participates in a QA/QC program that complies with the appropriate EPA guidance. Respondent shall follow, as appropriate, "Quality Assurance/Quality Control Guidance for Removal Activities: Sampling QA/QC Plan and Data Validation Procedures" (OSWER Directive No. 9360.4-01, April 1, 1990), as guidance for QA/QC and sampling. Respondent shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001), or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP) as meeting the Quality System requirements.

b. Upon request by EPA, Respondent shall have such a laboratory analyze samples submitted by EPA for QA monitoring. Respondent shall provide to EPA the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

c. Upon request by EPA, Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples. Respondent shall notify EPA not less than 10 days in advance of any sample collection activity, unless shorter notice is agreed to by EPA.

EPA shall have the right to take any additional samples that EPA deems necessary. Upon request, EPA shall allow Respondent to take split or duplicate samples of any samples it takes as part of its oversight of Respondent's implementation of the Work. Circumstances permitting, EPA shall notify Respondent not less than 10 days in advance of any sample collection activity unless shorter notice is agreed to by Respondent.

d. Respondent shall submit to EPA the results of all sampling and/or tests or other analytical data that it generated, or was/were generated on its behalf, with respect to implementing this Agreement in the monthly progress reports that the SOW requires or as otherwise agreed by EPA. Respondent shall maintain custody of all information and data that the Final Remedial Design Report and any deliverable relied upon or referenced. Upon EPA's request, Respondent shall provide such information and data to EPA.

e. If, at any time during the Early Design process, Respondent becomes aware of the need for additional data beyond the scope of the approved Work Plans, Respondent shall have an affirmative obligation to submit to EPA's Project Coordinator, within 20 days, a memorandum documenting the need for additional data.

34. Reporting.

a. Respondent shall submit a written progress report to EPA concerning actions undertaken pursuant to this Agreement by the 10th day of every month following the Effective Date, beginning the month following the Effective Date and ending the month following approval of the Pilot Project Completion Report required under Section 6.7.4.2.8 of the SOW, unless otherwise directed in writing by EPA's Project Coordinator. The reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period and the developments

anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems and planned resolutions of past or anticipated problems.

b. Respondent shall report all communications that it has with local, state, or other federal authorities related to the Early Design Work in the monthly progress reports.

c. At least 30 days prior to Respondent's conveyance of any interest in CMI Property, Respondent shall give written notice to the transferee that the property is subject to this Agreement and written notice to EPA of the proposed conveyance, including the name and address of the transferee. Respondent shall require that its successor comply with the immediately preceding sentence and Sections X (Access to the Site and Other Property) and XI (Access to Information).

d. Respondent shall submit all plans, reports and other Documents required by this Agreement or any work plan to be submitted to EPA in electronic form, unless EPA requests that a Document be submitted in paper form.

35. Final Pilot Project Construction Completion Report. Within 60 days after the final inspection following completion of construction and field verification of the Work for the Pilot Project for Group 1 Waste Rock Pile, Respondent shall submit a draft Final Pilot Project Construction Completion Report to EPA. The Final Pilot Project Construction Completion Report shall include, without limitation, the elements described in Section 6.7.4.1.10 of the SOW. The Final Pilot Project Construction Completion Report shall also include the following certification signed by a person who supervised or directed the preparation of the report:

> Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including

the possibility of fine and imprisonment for knowing violations.

36. Pilot Project Completion Report. Ten years after EPA's approval of the Final Pilot Project Construction Completion Report, or at such earlier time that Respondent and EPA agree that Respondent has collected enough data from the pilot project to adequately evaluate the performance of the pilot project, Respondent shall prepare and submit to EPA for approval a draft Pilot Project Completion Report summarizing and evaluating the data collected during the pilot project and evaluating the performance of the element of the pilot project. The completion report shall include without limitation the elements described in Section 6.7.4.2.8 of the SOW.

IX. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

37. After EPA's review of any plan, report, or other Document that is required to be submitted for EPA approval pursuant to this Agreement, EPA shall notify Respondent in writing that the Document has been:

a. approved in whole or part,

b. approved with conditions,

c. disapproved or

d. disapproved in whole or part with directions to Respondent to modify the Document to cure deficiencies and resubmit it.

EPA shall not modify or disapprove a Document without first providing Respondent with a written notice of deficiencies and an opportunity to cure the deficiencies and resubmit within the time period set forth in the notice (which shall not be less than 30 days except by agreement of the Project Coordinators), except where EPA determines that affording Respondent with an opportunity to resubmit would cause a substantial disruption of the Work or where a previous submission of the Document has been disapproved due to a material deficiency.

38. In the event of approval, approval with conditions, or modification of a Document by EPA, Respondent shall take any action required by the plan, report, or other deliverable as approved or modified by EPA, subject to Respondent's right to invoke the Dispute Resolution procedures set forth in Section XVI (Dispute Resolution) with respect to the modifications made or conditions set by EPA. Following EPA's approval or modification of a Document or portion thereof, Respondent shall not thereafter alter or amend such Document unless directed by EPA to do so. In the event that EPA modifies the submission to cure deficiencies pursuant to Paragraph 37(d) and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XVIII (Stipulated Penalties).

X. ACCESS TO THE SITE AND OTHER PROPERTY

39. If the Site, a part of the Site or other real property where access is necessary for the Work is CMI Property or is property controlled by Respondent:

a. Commencing on the Effective Date, Respondent shall provide EPA and the State and their representatives, contractors and subcontractors with access to the Site or such other real property owned or controlled by Respondent at all reasonable times to conduct any activity relating to the Agreement, including, but not limited to, the following:

1) monitoring the Work,
2) verifying any data or information submitted to EPA or the State,
3) conducting investigations regarding contamination at or near the Site,
4) collecting samples,
5) assessing the need for, planning, or implementing additional response actions at or near the Site,

6) assessing implementation of quality assurance and quality control practices as defined in the approved Quality Assurance Project Plans (QAPPs),

7) implementing the Work pursuant to the conditions set forth in Paragraph 84 (Work Takeover),

8) inspecting and copying records, operating logs, contracts or other documents maintained or generated by Respondent or its agents, consistent with Section XI (Access to Information),

9) assessing Respondent's compliance with the Agreement and

10) determining whether the Site or other real property is being used in a manner that is prohibited or restricted or that may need to be prohibited or restricted under this Agreement.

b. Commencing on the Effective Date, Respondent shall not use the Site or such other real property in any manner in the performance of the Work which EPA determines will pose an unacceptable risk to human health or the environment due to exposure to Waste Material or interfere with or adversely affect the implementation, integrity or protectiveness of the Early Design Actions.

c. If the Site or other real property where access is necessary for the Work is owned or controlled by persons other than Respondent, the United States or the State, Respondent shall use its best efforts to secure from such persons:

1) an agreement to provide such access for EPA, the State and Respondent and their representatives, contractors and subcontractors to conduct any activity relating to this Agreement including, but not limited to, the early design activities described in the SOW and

2) an agreement enforceable by EPA, the State and Respondent that such persons will refrain from using the Site or such other real property in any manner which EPA determines will pose an unacceptable risk to human health or the environment due to exposure to Waste Materials or will interfere with or adversely affect the implementation, integrity or protectiveness of the Early Design Actions.

d. For the purposes of Paragraph 39(c), "best efforts" include the payment of reasonable sums of money for access. Respondent shall describe in writing its efforts to obtain access.

e. EPA may assist Respondent in gaining access to the extent necessary to effectuate the response actions described in this Agreement, using such means as EPA deems appropriate. Respondent shall reimburse EPA for all costs and attorney's fees incurred by EPA in obtaining such access in accordance with the procedures in Section XV (Payment of Response Costs).

40. Notwithstanding any provision of this Agreement, EPA and the State retain all of their access authorities and rights, as well as all their rights to require land or water use restrictions, including related enforcement authority under CERCLA, SWDA, WQA, Mining Act and other federal and State law.

XI. ACCESS TO INFORMATION

41. Upon request, Respondent shall provide EPA with copies of all Documents and information in Respondent's possession or control or the possession or control of its contractors or agents relating to the implementation of this Agreement, including, but not limited to, sampling, the results of any scientific testing of samples collected at the Site, chain of custody

records, manifests, trucking logs, receipts, reports, correspondence and other Documents relating to the Work. Respondent shall make its employees, agents and representatives with knowledge of facts relevant to the Work available to EPA and the State for purposes of investigation, information gathering or testimony.

42. Respondent may assert a business confidentiality claim under CERCLA § 104(e)(7), 42 U.S.C. § 9604(e)(7), or 40 C. F. R. § 2.203(b) (or under relevant New Mexico law, such as the Mining Act § 69-36-10, as to any Documents required to be submitted to the State under this Agreement), with respect to all or part of a Document submitted to EPA under this Agreement. A Document determined by EPA to be confidential will be afforded the protection provided by law. If no claim of confidentiality is made at the time a Document is submitted to EPA or, if EPA has notified Respondent that the Document is not confidential under CERCLA § 104(e)(7) or 40 C.F.R. § 2.203(b), the public may be given access to the Document without further notice to Respondent. Respondent shall segregate and clearly identify all documents or information submitted under this Agreement for which Respondent asserts business confidentiality claims.

43. Respondent may assert that a Document required to be submitted to EPA under this Agreement is privileged under the attorney-client privilege, the attorney work product doctrine or any other privilege or exemption from disclosure recognized under federal law (or New Mexico law as to any Documents required to be submitted to the State under this Agreement) (collectively referred to as "privilege" for purposes of this Agreement). If Respondent asserts such a privilege in lieu of providing EPA and the State with the Document, it shall provide EPA and the State in writing with (a) a description of the Document, including the title, date, author and nature of the contents, (b) the name, title and address of each addressee and recipient of the Document and (c) identification of the privilege asserted by Respondent. Respondent may not

assert a privilege with respect to a Document required by this Agreement to be created or generated.

44. No claim of privilege or confidentiality shall be made with respect to data evidencing conditions on or near the Site, including, sampling, analytical, monitoring, hydrogeologic, scientific, chemical or engineering data, generated pursuant to this Agreement.

XII. RECORD RETENTION

45. For 10 years after receipt of EPA's Notice of Completion of Work pursuant to Section XXVIII (Notice of Completion of Work) Respondent shall preserve and retain all non-identical copies of Documents now in its possession or control or which come into its possession or control which relate to the performance of the Work, notwithstanding a corporate retention policy to the contrary. During the 10 year period Respondent shall instruct its contractors and agents to preserve all such Documents relating to performance of the Work. After the conclusion of the 10 year period Respondent shall notify EPA at least 90 days prior to the destruction of any Document retained under this Paragraph and shall deliver such Document or other retained Document to EPA upon request. However, if the Parties execute and the Court enters a Consent Decree for remedial design and remedial action at the Site, the requirements of the Consent Decree shall supersede this Paragraph 45.

46. Respondent represents that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any Document, other than identical copies, relating to its potential CERCLA liability for any removal or remedial actions relating to the Site since Respondent's receipt of EPA's Special Notice Letter relating to the Site and that it has fully complied with all EPA requests for information pursuant to CERCLA §§ 104(e),122(e) , 42 U.S.C. §§ 9604(e), 9622(e), and SWDA § 3007, 42 U.S.C. §

6927.

XIII. COMPLIANCE WITH OTHER LAWS

47. Respondent shall perform all actions required pursuant to this Agreement in accordance with all applicable State and federal laws and regulations, unless an exemption from such requirements is specifically provided by law or in this Agreement. The activities conducted pursuant to this Agreement, if approved by EPA, shall be considered consistent with the NCP.

48. Except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and the NCP, no permit shall be required for any portion of the Work conducted entirely on-site. Where any portion of the Work requires a federal or State permit or approval, Respondent shall submit timely applications and take all other actions necessary to obtain and to comply with all such permits or approvals.

49. This Agreement is not and shall not be construed to be a permit issued pursuant to any federal or State statute or regulation.

XIV. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

50. In the event of any action or occurrence during performance of the Work that causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release. Respondent shall take these actions in accordance with all applicable provisions of this Agreement and SOW, including, but not limited to, the Health and Safety Plan. Respondent shall immediately notify EPA's, MMD's and NMED's Project Coordinators. If Respondent fails to take appropriate response action as required by this Paragraph and EPA takes such action

instead, Respondent shall reimburse EPA all costs of the response action consistent with the NCP pursuant to Section XV (Payment of Response Costs).

51. In the event of any release of a hazardous substance from the Site during performance of the Work, Respondent shall immediately notify EPA's, MMD's and NMED's Project Coordinators and the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within seven days after each release, setting forth the events that occurred and the action taken or to be taken to mitigate a release or any endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to the duty to report under CERCLA § 103(a), 42 U.S.C. § 9603(c), and section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004.

XV. PAYMENT OF RESPONSE COSTS

52. Future Response Costs

a. Within 45 days of the Effective Date, Respondent shall pay to EPA $1,250,000.00 in advance for Future Response Costs. The total amount paid shall be deposited by EPA in the Chevron Questa Mine Early Design Actions Special Account, within the EPA Hazardous Substance Superfund. These funds shall be retained and used by EPA for Future Response Costs as provided in this Agreement. Payment shall be made by FedWire Electronic Funds Transfer (EFT) according to Paragraph 54.

b. Respondent shall pay to EPA all Future Response Costs not inconsistent with the National Contingency Plan. On at least an annual basis, EPA will send Respondent a bill requiring payment that includes certified cost documentation. On or about the time a bill and certified cost documentation package are provided under this Paragraph, EPA shall provide

available monthly progress reports from contracts used for the oversight of Work performed under this Agreement. If a progress report is not available, EPA shall timely provide the report once it is available to EPA. Respondent shall make all payments within 45 days of Respondent's receipt of each bill requiring payment, except as otherwise provided in Paragraph 57. Respondent shall make all payments required by this Paragraph in the manner required by Paragraph 54 with notice as required by Paragraph 55. The total amount paid will be deposited by EPA in the Chevron Questa Mine Early Design Actions Special Account within the EPA Hazardous Substance Superfund. These funds will be retained and used by EPA for Future Response Costs, provided, however, that any amounts remaining in the Chevron Questa Mine Early Design Actions Special Account upon completion of the Work will be disbursed or credited in accordance with Paragraph 52(d).

c. In the event that EPA's use of the Chevron Questa Mine Early Design Actions Special Account results in there being $200,000 or less in the Special Account, and EPA provides a cost estimate that demonstrates that the remaining amount will be exhausted before receipt of the next reimbursement payment under Paragraph 52(b) even with the timely issuance of a bill under Paragraph 52(b), Respondent agrees, within 45 days of EPA's notice that the Chevron Questa Mine Early Design Actions Special Account has reached $200,000 or less, to remit $200,000 to EPA for deposit in the Chevron Questa Mine Early Design Actions Special Account, in accordance with the payment procedure described in Paragraph 54. Any amounts received under this Paragraph will be disbursed or credited to Respondent in the final accounting in accordance with Paragraph 52(d).

d. After EPA issues its written Certification of Completion of Work pursuant to Section XXVIII (Notice of Completion of Work) EPA shall timely perform a final accounting of

Future Response Costs and provide the accounting and final certified cost documentation to Respondent. Within 45 days after receipt of the final accounting, Respondent may dispute expenditures of any amounts paid by Respondent pursuant to Paragraph 52(c), if Respondent determines that EPA or the State has made a mathematical error or if Respondent alleges that a cost item that is included represents costs that are inconsistent with the NCP or outside the definition of Future Response Costs. EPA shall either apply any unused amount paid by the Respondent pursuant to Paragraphs 52(a) or 52(c) (and any amount paid by Respondent pursuant to Paragraph 52(c) that is successfully disputed by Respondent after the final accounting) to any other unreimbursed response costs or response actions remaining at the Site for which the Respondent is liable, or remit and return to Respondent any unused amount of the funds paid by Respondent pursuant to Paragraphs 52(a) or 52(c) (and any amount paid by Respondent pursuant to Paragraph 52(c) that is successfully disputed by Respondent after the final accounting), as elected by Respondent.

53. Respondent may contest payment of any Future Response Costs under Paragraph 52 that were incurred during the time period that any prepaid amounts were received under Paragraph 52(c), with the exception of amounts due under Paragraphs 52(a) and 52(c), if Respondent determines that EPA or the State has made a mathematical error or if Respondent alleges that a cost item that is included represents costs that are inconsistent with the NCP or outside the definition of Future Response Costs.

54. Respondent shall make all payments required by Paragraph 52 to EPA by Fedwire Electronic Funds Transfer (EFT) to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33

33 Liberty Street
New York NY 10045

Field Tag 4200 of the Fedwire message should read: "D 68010727 Environmental Protection Agency" and should reference Site/Spill ID Number 06DL and the EPA docket number for this action.

55. At the time of payment Respondent shall send a notice of the payment to:

Chief, Enforcement Assessment Section
U.S. EPA
Enforcement Assessment Section (6SF-TE)
1445 Ross Ave, Suite 1200
Dallas, TX 75202

and by email to acctsreceivable.cinwd@epa.gov, or by mail to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

Such notice shall reference the Site/Spill ID Number 06DL and EPA docket number for this action.

56. Interest. If the amount billed under Paragraph 52(b) exceeds $1,250,000 plus any amounts previously paid under Paragraph 52(c), and Respondent fails to pay and does not dispute a Future Response Cost within 45 days after Respondent's receipt of an EPA billing statement under Paragraph 52(b), Respondent shall pay Interest on the unpaid balance that exceeds $1,250,000 plus any amounts previously paid under Paragraph 52(c). Interest on Future Response Costs which are not paid within the 45-day period shall accrue beginning on the billing date and continue to accrue until paid. Such payment of Interest shall be in addition to other remedies or sanctions for Respondent's failure to make timely payments under this Agreement, including the payment of stipulated penalties.

57. Respondent may dispute the payment of a Future Response Cost if Respondent determines that EPA or the State has made a mathematical error or if Respondent alleges that a cost item that is included represents costs that are inconsistent with the NCP or outside the definition of Future Response Costs. Respondent may object to a cost item by notifying EPA in writing within 45 days after receipt of a billing statement for the item. The objection shall identify each disputed item and state the basis for objecting to each item.

58. Within 45 days after notifying EPA of the objection, Respondent shall pay all billed and due uncontested Future Response Costs to EPA in the manner described in Paragraph 52. At that time, Respondent shall establish an interest-bearing escrow account with a domestic bank or trust company which is insured by the Federal Deposit Insurance Corporation and deposit funds equal to the amount of contested costs in the account. Simultaneously, Respondent shall send copies of the check paying the uncontested Future Response Costs and the bank documents opening the account to EPA.

59. Simultaneously with the opening of the escrow account, Respondent shall initiate the dispute resolution procedures in Section XVI (Dispute Resolution). If EPA prevails with respect to any part of the disputed costs, Respondent shall pay EPA the cost items resolved in EPA's favor with accrued interest within seven days after resolution of the dispute in the manner described in Paragraph 52. Any funds remaining in the escrow account shall be returned to Respondent. The dispute resolution procedures set forth in this Paragraph and the procedures set forth in Section XVI (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

XVI. DISPUTE RESOLUTION

60. Unless otherwise expressly provided in this Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes under or relating to this Agreement. The procedures set forth in this Section shall not apply to actions by EPA to enforce obligations of Respondent that have not been disputed in accordance with this Section.

61. Any dispute under or relating to this Agreement shall initially be the subject of informal negotiations between the Parties. The Parties may use a neutral facilitator to assist in their informal negotiations. Informal negotiations shall not exceed 20 days from the time the dispute arises, unless the 20-day period is extended by written agreement of the Parties. A dispute arises when one Party receives a written notice of dispute from the other Party.

62. Statements of Position

a. If the Parties cannot resolve a dispute by informal negotiations under Paragraph 61, EPA's position shall be considered binding unless within 14 days after the informal negotiation period Respondent invokes the formal dispute resolution procedures of this Section by serving EPA with a statement of position regarding the matter in dispute. The statement shall include an analysis of the relevant facts and law and Respondent's arguments supporting its position. Respondent shall also submit any documents supporting its position.

b. Within 30 days after receipt of Respondent's statement of position, EPA shall serve Respondent with a statement of position responding to Respondent's statement.

c. An administrative record of any dispute under this Section shall be maintained by EPA and shall contain any statement of position, response, and reply, including supporting documentation, submitted pursuant to this Section. Where appropriate, EPA may allow submission of supplemental statements of position by the Parties to the dispute.

63. Based on the administrative record of the dispute, the Director of the Superfund Division for EPA Region 6 (Director) will issue a final decision resolving the dispute, which shall be binding on Respondent.

64. Invocation of formal dispute resolution procedures under this Section XVI shall not extend, postpone or affect Respondent's responsibilities under this Agreement which are not the subject of the dispute, unless EPA agrees otherwise. Stipulated penalties relating to a disputed matter shall accrue from the first day of noncompliance with any applicable provision of this Agreement. If Respondent does not prevail, stipulated penalties shall be assessed and paid as provided in Section XVIII (Stipulated Penalties).

65. Any agreement reached by the Parties pursuant to this Section shall be in writing and incorporated into and become an enforceable part of this Agreement. Following resolution of the dispute, as provided by this Section, Respondent shall comply with the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision.

XVII. FORCE MAJEURE

66. Respondent agrees to perform all requirements of this Agreement within the time limits set forth herein, unless performance is delayed by a *force majeure*. A *force majeure* event is defined as any event arising from causes beyond the control of Respondent or any entity controlled by Respondent, including Respondent's contractors and subcontractors, which delays or prevents performance of Work or compliance with a requirement of this Agreement despite Respondent's best efforts to perform or comply with the requirement. The requirement that Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential *force majeure* event: (a) as it is occurring; and (b) following the potential *force majeure* event, such that the delay is minimized to the greatest extent possible. A

force majeure does not include Respondent's financial inability to complete the Work, the increased cost of performance or Respondent's failure to meet performance standards set forth in this Agreement.

67. If an event occurs or has occurred that may delay compliance with a requirement of this Agreement or the performance of Work, whether or not caused by a *force majeure* event, Respondent shall notify EPA orally within five working days of when Respondent becomes aware that the event might cause a delay. Within five working days thereafter, Respondent shall provide EPA with a written explanation and description of the reasons for the delay, the anticipated duration of the delay, all actions taken or to be taken to prevent or minimize the delay, a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay, the factual basis for Respondent's attributing such delay to a *force majeure* event (if Respondent has asserted or intends to assert such a claim) and a statement as to whether the event may cause or contribute to an endangerment to public health or welfare or the environment. Failure to comply with the requirements of this Paragraph shall preclude Respondent from asserting a *force majeure* claim for the event for the period of time of such failure to comply and for an additional delay caused by such failure. Respondent shall be deemed to know of any circumstance of which Respondent, any entity controlled by Respondent, or Respondent's contractors knew or should have known.

68. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for compliance with the requirement or performance of Work affected by the *force majeure* will be extended by EPA as necessary. An extension shall not extend the time for compliance of any other requirement or performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event,

EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondent in writing of an extension, if any, for compliance with the requirement or performance of the Work affected by the *force majeure* event.

XVIII. STIPULATED PENALTIES

69. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 70 and 71 for the failure to comply with the requirements of this Agreement, unless excused under Section XVII (Force Majeure). Compliance by Respondent shall include completion of the activities under this Agreement or any work plan or other plan approved by EPA under this Agreement identified below in accordance with applicable requirements of law, this Agreement, the SOW or any plan or other document approved by EPA pursuant to this Agreement within the specified time schedules established and approved under this Agreement. Stipulated penalties will begin to accrue from the date specified in time schedules established and approved under this Agreement. If no specified time schedules apply, the stipulated penalties will begin to accrue ten days after the date EPA issues a notice of violation to Respondent, unless the violation is cured within that period.

70. Stipulated Penalty Amounts - Major Deliverables and Payments

a. The following stipulated penalties shall accrue per violation per day for any noncompliance with the payment requirements identified in Section XV (Payment of Response Costs) or the milestones identified in Paragraph 70(b):

$1,500	1st through 14th day
$2,500	15th through 30th day
$3,500	31st day and thereafter

b. Compliance Milestones. Submission to EPA of the following major deliverables in accordance with the schedules found in the Statement of Work or Work Plans:

1) Work Plans for the Early Design Actions (Section 6.2.4 of the SOW)
2) Overall Site Plan (Section 6.2.7 of the SOW) and Health and Safety Plan (Section 6.2.8 of the SOW)
3) Pre-Design Report for Additional Groundwater Investigation at the Tailing Facility (Section 6.3.3 of the SOW)
4) Pre-Design Report for Investigations to Upgrade Seepage Barrier and Well Extraction Systems (Section 6.4.3 of the SOW).
5) Pre-Design Reports for Borrow Characterization of Spring Gulch Waste Rock (Section 6.5.3 of the SOW)
    a. Borrow Characterization Report
    b. Greenhouse Study Report
6) Treatability Study Evaluation Report for Water Treatment (Section 6.8.5 of the SOW)
7) General Design Guidelines (Section 6.6.2 of the SOW)
8) Roadside Waste Rock Pile Design Options Report (Section 6.6.3 of the SOW)
9) Integrated Waste Rock Pile Conceptual Design Options Report (Section 6.6.4 of the SOW)
10) Group 1 Waste Rock Pile Final Design Report and Pilot Project Work Plan (Section 6.7.2.4 of the SOW)

71. Stipulated Penalty Amounts – Miscellaneous

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 71(b):

$500	1st through 14th day
$1,000	15th through 30th day
$1,500	31st day and thereafter

b. Miscellaneous noncompliance:

1) Failure to submit to EPA any required reports not identified in Paragraph 70(b).

2) Failure to use approved quality assurance, quality control, and chain of custody procedures for all sampling and analysis undertaken pursuant to the Statement of Work and to provide split samples in accordance with Paragraph 33.

3) Failure to establish and maintain financial assurance in accordance with Section XXVI (Financial Assurance).

4) Failure to retain records as required by Section XII (Record Retention).

5) Failure to conduct/participate in community relations activities as specified in the Community Relations Plan.

72. In the event Respondent disputes a stipulated penalty, the disputed costs must be paid by Respondent into an escrow account while the dispute is pending.

73. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 84 (Work Takeover), Respondent shall be liable for a stipulated penalty in the amount of $800,000.

74. All penalties shall accrue beginning on the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or violation. Stipulated penalties shall not accrue with respect to a deficient submission under Section VIII (Performance of the Work) during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date EPA notifies Respondent of a deficiency, or with respect to a decision by the Director under Section XVI (Dispute Resolution), during the period beginning on the 21st day after the date that EPA's Statement of Position is received until the date that the Director issues a final decision regarding such dispute. Nothing in this Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Agreement.

75. Following EPA's determination that Respondent has failed to comply with a requirement of this Agreement, EPA may serve Respondent written notice of the failure, describing the noncompliance, and a demand for payment of penalties. Penalties shall accrue as provided in the preceding Paragraph, regardless of whether EPA has notified Respondent of a violation.

76. A penalty accruing under this Section shall be due and payable to EPA within 60 days after Respondent's receipt of an EPA demand for payment of the penalty, unless Respondent invokes the dispute resolution procedures under Section XVI (Dispute Resolution). Respondent shall make payments required by this Paragraph to EPA by Fedwire Electronic Funds Transfer to:

Federal Reserve Bank of New York
ABA = 021030004

Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York NY 10045
Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference stipulated penalties, Site/Spill ID Number 06DL, and the EPA docket number for this action. At the time of payment, Respondent shall notify EPA Region 6 that payment has been made as provided in Paragraph 55 above.

77. The payment of penalties shall not affect Respondent's obligation to complete performance of the Work.

78. Penalties shall continue to accrue as provided in Paragraph 74 during any dispute resolution period, but need not be paid until 30 days after the dispute is resolved by agreement or by receipt of the Director's decision.

79. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties and Interest. Respondent shall pay Interest on the unpaid balance as follows: (a) if Respondent has timely invoked dispute resolution such that the obligation to pay stipulated penalties has been stayed pending the outcome of dispute resolution, Interest shall accrue from the date the payment of stipulated penalties is due pursuant to Paragraph 76 until the date of payment or (b), if Respondent fails to timely invoke dispute resolution, Interest shall accrue from the date of demand made pursuant to Paragraph 75 until the date of payment.

80. Nothing in this Agreement shall be construed as prohibiting, altering or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Agreement or the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to CERCLA §§ 106(b), 122(*l*), 42 U.S.C. §§

9606(b), 9622(*l*), and punitive damages pursuant to CERCLA § 107(c)(3), 42 U.S.C. § 9607(c)(3), provided, however, that EPA shall not seek such penalties or punitive damages for any violation for which a stipulated penalty is provided in this Section, except in the case of a willful violation of this Agreement or in the event EPA takes over performance of a portion or all of the Work pursuant to Paragraph 84 (Work Takeover). Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Agreement.

XIX. EPA'S COVENANT NOT TO SUE

81. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Agreement and except as otherwise specifically provided in this Agreement, EPA covenants not to sue or to take administrative action against Respondent pursuant to CERCLA § 106 or § 107(a), 42 U.S.C. § 9606 or § 9607(a), or SWDA § 7003, 42 U.S.C. § 6973, for the Work and Future Response Costs. This covenant shall take effect on the Effective Date and is conditioned on Respondent's complete and satisfactory performance of all its obligations and responsibilities under this Agreement, including payment of Future Response Costs pursuant to Section XV (Payment of Response Costs). This covenant applies only to Respondent and not any other person.

XX. EPA'S RESERVATIONS OF RIGHTS

82. Except as specifically provided herein, nothing in this Agreement shall limit the power and authority of EPA or the United States to take, direct or order all actions necessary to protect public health, welfare or the environment or to prevent, abate or minimize an actual or threatened release of hazardous substances, pollutants or contaminants or hazardous or solid waste on, at or from the Site. Nothing in this Agreement shall prevent EPA from seeking legal or

equitable relief to enforce the terms of this Agreement, taking other legal or equitable action as it deems appropriate and necessary or requiring Respondent to perform additional activities in the future pursuant to CERCLA or other applicable law.

83. The covenant not to sue set forth in Section XIX does not pertain to any matters other than those expressly identified therein. EPA reserves and this Agreement is without prejudice to all rights EPA has or may have with respect to Respondent relating to all other matters, including, but not limited to:

a. liability for failure by Respondent to meet a requirement of this Agreement,

b. liability for costs not included within the definition of Future Response Costs,

c. liability for performance of response action other than the Work,

d. criminal liability,

e. liability for damages for injury to, destruction of or loss of natural resources and for the costs of any natural resource damage assessments,

f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site, and

g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site which are not paid as Future Response Costs under this Agreement.

84. Work Takeover. In the event EPA determines that Respondent has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice (Work Takeover Notice) to Respondent. Any Work Takeover Notice issued by EPA will specify the

grounds on which the notice was issued and provide Respondent a period of 14 days within which to remedy the circumstances giving rise to issuance of the notice. After expiration of the 14-day notice period, if Respondent has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of any or all portion(s) of the Work as EPA determines necessary (Work Takeover). EPA shall notify Respondent in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph. Respondent may invoke the procedures set forth in Section XVI (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. The commencement of any Work Takeover pursuant to this Paragraph shall trigger EPA's right to receive the benefit of any financial assurance provided pursuant to Section XXVI (Financial Assurance). Costs that the United States incurs in performing the Work pursuant to this Paragraph that are not covered by Section XXVI (Financial Assurance) shall be considered Future Response Costs that Respondent shall pay pursuant to Section XV (Payment of Response Costs). Notwithstanding any other provision of this Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXI. RESPONDENT'S COVENANT NOT TO SUE

85. Except as specifically provided in this Agreement, Respondent covenants not to sue and agrees not to assert any claim or cause of action against the United States, EPA or EPA's contractors or employees with respect to the Work, Future Response Costs or this Agreement, including:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on CERCLA § 106(b)(2), § 107, § 111, 112 or § 113, 42 U.S.C. § 9606(b)(2), § 9607, § 9611, § 9612 or § 9613, or any other provision of law,

b. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the New Mexico Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law or

c. any claim made pursuant to CERCLA § 107 or § 113, 42 U.S.C. § 9607 or § 9613, SWDA § 7002(a), 42 U.S.C. § 6972(a), or State law relating to the Work or Future Response Costs.

The covenant not to sue in this Paragraph 85 does not include, and Respondent specifically reserves, its right to assert claims pursuant to CERCLA, 42 U.S.C. § 9601, *et seq.*, relating to the Work, Future Response Costs or this Agreement against the U.S. Department of Agriculture, the U.S. Department of the Interior, and/or the General Services Administration and their components, predecessors, successors and assigns, provided that the U.S. Department of Agriculture, the U.S. Department of the Interior, and/or the General Services Administration and their components, predecessors, successors and assigns have not each resolved their potential liability at the Site with EPA as of the time Respondent asserts such claims. These covenants not to sue shall not apply in the event EPA or the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraph 82, but only to the extent that Respondent's claims arise from the same response action, response costs or damages that the United States is seeking pursuant to the applicable reservation.

d. Respondent reserves and this Agreement is without prejudice to claims against the United States subject to the provisions of Chapter 171 of Title 28, United States Code, and brought pursuant to any statute other than CERCLA or SWDA and for which a waiver of sovereign immunity is provided by a statute other than CERCLA or SWDA for money damages for injury or loss of property or personal injury or death caused by a negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her employment under circumstances where the United States, if a private person would be liable to the claimant in accordance with the law of the place where the alleged act or omission occurred. The foregoing shall not include any claim based on EPA's selection of response actions or EPA's oversight of the Work or approval of Respondent's plans, reports, other deliverables or activities.

86. Respondent agrees not to seek judicial review of the final rule listing the Site on the NPL based on a claim that changed Site conditions that resulted from the performance of the Work in any way affected the basis for listing the Site.

87. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXII. OTHER CLAIMS

88. By entering into this Agreement, EPA does not assume liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. EPA shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors or consultants in carrying out actions pursuant to this Agreement.

89. Except as expressly provided in Section XIX (EPA's Covenant Not to Sue), nothing in this Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Agreement for any liability such person may have under CERCLA, other statutes or common law, including any claims the United States may have for costs, damages and interest under CERCLA § 106 or § 107, 42 U.S.C. § 9606 or § 9607.

90. No action or decision by EPA pursuant to this Agreement shall create any right to judicial review, except as provided in CERCLA § 113(h), 42 U.S.C. § 9613(h).

XXIII. EFFECT OF SETTLEMENT AND CONTRIBUTION

91. This Agreement constitutes an administrative settlement for purposes of CERCLA §§ 113(f)(2), 122(h)(4), 42 U.S.C. §§ 9613(f)(2), 9622(h)(4), and as of the Effective Date Respondent is entitled to protection from contribution actions or claims as provided by CERCLA §§ 113(f)(2), 122(h)(4), 42 U.S.C. §§ 9613(f)(2), 9622(h)(4), or as may be otherwise provided by law for "matters addressed" in this Agreement. "Matters addressed" in this Agreement are the Work and Future Response Costs. This Agreement constitutes an administrative settlement for purposes of CERCLA § 113(f)(3)(B), 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondent has, as of the Effective Date, resolved its liability to EPA for the Work and Future Response Costs.

92. With respect to any suit or claim relating to this Agreement, Respondent shall notify EPA in writing (a) not later than 60 days prior to the initiation of such suit or claim brought by Respondent, (b) not later than 10 days after the service of a complaint or claim on Respondent, (c) not later than 10 days after service on Respondent of a motion for summary judgment or (d)

not later than 10 days after Respondent's receipt of a court order setting a case for a hearing on a dispositive motion filed by an opposing party or for trial.

93. In any subsequent administrative or judicial proceeding initiated by EPA or the United States on behalf of EPA for injunctive relief, recovery of response costs or other relief relating to the Site, Respondent agrees that it will not assert or maintain any defense or claim based on the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim splitting or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case, provided that nothing in this Paragraph affects the enforceability of the EPA's covenant set forth in Section XIX (EPA's Covenant Not to Sue).

94. Respondent agrees that the time period commencing on the Effective Date and ending on the date EPA receives Respondent's full payment required by Section XV (Payment of Response Costs) and, if any, Section XVIII (Stipulated Penalties) shall not be included in computing the limitation period applicable to any action brought by EPA or the United States on EPA's behalf relating to "matters addressed" as defined in Paragraph 91 and that in any action brought by the United States related to the "matters addressed," Respondent will not assert or maintain any defense or claim based upon principles of limitations, waiver, laches, estoppel or other defense based on the passage of time during such period.

XXIV. INDEMNIFICATION

95. Respondent shall indemnify and save and hold harmless the United States and its employees, agents, contractors, subcontractors and representatives from any and all claims or causes of action arising from or on account of negligent or other wrongful acts or omissions of Respondent or its officers, directors, employees, agents, contractors or subcontractors in carrying

out actions pursuant to this Agreement. Respondent agrees to pay the United States all costs incurred by the United States, including, but not limited to, attorney's fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent or its officers, directors, employees, agents, contractors, subcontractors or any other persons acting on its behalf or under its control in performing, conducting or carrying out obligations, responsibilities or activities pursuant to this Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Agreement. Neither Respondent nor any such contractor or other representative of Respondent shall be considered an agent of the United States.

96. EPA shall notify Respondent of any claim for which the United States intends to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

97. Respondent waives all claims against the United States for damages or reimbursement for or set-off of any payments made or to be made to the United States arising from or on account of any contract, agreement or arrangement between Respondent and any person for performance of Work relating to the Site, including, but not limited to, claims on account of construction delays.

98. Respondent shall indemnify and save and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement or arrangement between Respondent and any person for performance of Work relating to the Site, including, but not limited to, claims on account of construction delays.

XXV. INSURANCE

99. No later than seven days prior to commencing any on-Site work under this Agreement, Respondent shall secure and maintain comprehensive general liability insurance and automobile insurance with limits of $2 million combined single limit, in force for the duration of this Agreement, naming EPA as a co-insured. Respondent shall provide a copy of each insurance policy to EPA. On or about each anniversary of the Effective Date Respondent shall provide EPA with certificates of such insurance coverage and, if there is any change to an insurance policy, a copy of the changed insurance policy. For the duration of the Agreement, Respondent shall satisfy or ensure that its contractors and subcontractors comply with all applicable laws and regulations regarding worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Agreement. If Respondent demonstrates by evidence satisfactory to EPA that a contractor or subcontractor maintains insurance equivalent to that described above or insurance covering some or all of the same risks, but in an equal or lesser amount, Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

100. Within 30 days after the Effective Date, Respondent shall establish and maintain financial security for the benefit of EPA in the amount of $6,300,000 in one or more of the following forms in order to secure (in conjunction with financial assurance provided under MMD Mining Act Permit TA-001RE and NMED Discharge Permit 1055, and amendments thereto) the full and final completion of Work by Respondent, provided that, if Respondent intends to use multiple mechanisms under this Agreement, such mechanisms shall be limited to surety bonds guaranteeing payment, letters of credit, trust funds and insurance policies:

a. a surety bond unconditionally guaranteeing payment and/or performance of the Work,

b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by a financial institution acceptable to EPA,

c. a trust fund administered by a trustee acceptable to EPA,

d. a policy issued by an insurance carrier acceptable to EPA which ensures the payment and/or performance of the Work,

e. written guarantee to pay for or perform the Work provided by one or more parent companies of Respondent or by one or more unrelated companies that have a substantial business relationship with Respondent and a demonstration that any such guarantor company satisfies the financial test requirements of 40 C.F.R. § 264.143(f) and/or

f. a demonstration by Respondent of sufficient financial resources to pay for the Work which includes a demonstration that satisfies the requirements of 40 C.F.R. § 264.143(f).

101. Respondent shall provide copies of all Documents relating to the financial assurance proposed by Respondent. Within 30 days of receipt of the Documents EPA shall approve, approve with modifications or disapprove the financial assurance proposed by Respondent and so notify Respondent in writing. If disapproved, Respondent shall submit a revised proposal which cures the deficiencies noted by EPA within 30 days of Respondent's receipt of EPA's notice of disapproval.

102. Respondent shall not assert that this Agreement or the establishment and maintenance of financial assurance under this Agreement pre-empts or otherwise precludes the State from requiring financial assurance for the Site under the WQA or the Mining Act or regulations or permits promulgated or issued thereunder , except that Respondent reserves the

right to assert that this Agreement or the establishment and maintenance of financial assurance under this Agreement pre-empts or otherwise precludes the State from requiring duplicative financial assurance for the Work for which Respondent has provided financial assurance to EPA under this Agreement.

103. If EPA notifies Respondent that the estimated cost of completing the Work has increased, Respondent shall submit a revised form of financial assurance for EPA approval which is adequate to assure performance of the Work at the revised cost estimate within 30 days after receiving EPA's notice of the increased cost estimate. If an alternative or revised financial assurance is required as described in this Paragraph, if Respondent cannot obtain such alternative or revised form of financial assurance within such 30-day period, and provided further that Respondent shall have commenced to obtain such revised or alternative form of financial assurance within such 30-day period, and thereafter diligently proceeds to obtain the same, EPA shall extend such period for such time as is reasonably necessary for Respondent in the exercise of due diligence to obtain such revised or alternative form of financial assurance, such additional period not to exceed 60 days. Respondent's inability to demonstrate financial ability to complete the Work shall not excuse performance of any Work.

104. If Respondent seeks to ensure completion of the Work through a guarantee pursuant to Paragraph 100(e) of this Agreement, Respondent shall (a) demonstrate to EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. § 264.143(f) and (b) resubmit sworn statements to EPA setting forth the information required by 40 C.F.R. § 264.143(f) on the anniversary of the Effective Date or such other date as provided in 40 C.F.R. § 264.143(f)(5) or as otherwise determined by EPA. For the purposes of this Agreement, wherever 40 C.F.R. § 264.143(f) refers to "sum of current closure and post-closure costs estimates and the current

plugging and abandonment costs estimates," the dollar amount to be used in the relevant financial test calculations shall be the current cost estimate of $6,300,000 (the portion of the Work not covered by financial assurance under the MMD Mining Act Permit TA-001RE and NMED Discharge Permit 1055) for the Work at the Site and any other SWDA, CERCLA, TSCA or other federal environmental obligations financially assured by Respondent or a guarantor by means of passing a financial test.

105. If Respondent can show after the Effective Date that the estimated cost to complete the remaining Work is less than the amount set forth in Paragraph 100, Respondent may on or about any anniversary date of the Effective Date or at any other time agreed to by the Parties reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA in accordance with the requirements of this Section and may reduce the amount of financial assurance after receiving EPA's written approval. In the event of a dispute, Respondent may seek dispute resolution pursuant to Section XVI (Dispute Resolution). Respondent may reduce the amount of financial assurance in accordance with EPA's written decision resolving the dispute.

106. Respondent may change the form of financial assurance provided under this Section upon notice to and prior written approval by EPA. In the event of a dispute, Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

107. The commencement of any Work Takeover pursuant to Paragraph 84 shall trigger EPA's right to receive the benefit of any financial assurance provided pursuant to this Section and at such time EPA shall have immediate access to resources guaranteed under any such

financial assurance mechanism, whether in cash or in kind, as needed to continue and complete the Work assumed by EPA under the Work Takeover.

XXVII. MODIFICATIONS

108. This Agreement and its Appendices may be modified only by the written agreement of the Parties.

109. To modify a work plan, schedule or the SOW, Respondent shall submit a written request to EPA which includes a detailed description of the proposed modification and the need for the modification. Respondent may not proceed with the requested modification without EPA's written approval.

110. No informal advice, guidance, suggestion or comment by an EPA employee or representative regarding reports, plans, specifications, schedules or other Documents submitted by Respondent to EPA shall relieve Respondent of its obligation to obtain EPA formal approval required by this Agreement or relieve Respondent of its duty to comply with all requirements of this Agreement.

XXVIII. NOTICE OF COMPLETION OF WORK

111. Upon review of the Final Pilot Project Completion Report submitted by Respondent under this Agreement and Section 6 of the SOW, EPA will provide written notice to Respondent of whether EPA has determined that all the Work required by this Agreement has been fully performed. If EPA determines that the Work has not been so performed, it will provide Respondent with a description of the deficiencies and require that Respondent modify the relevant Work Plan, if appropriate, to correct the deficiencies. If EPA requires Respondent to modify a Work Plan, Respondent shall implement the modified Work Plan and submit a modified Final Pilot Project Completion Report in accordance with the EPA notice. Failure by

Respondent to implement the approved modified Work Plan shall be a violation of this Agreement.

XXIX. SERVICE OF DOCUMENTS

112. True and correct copies of all Documents which Respondent is required by this Agreement to submit to EPA shall be contemporaneously provided to the State electronically and by first-class mail or, if requested by the recipient, overnight delivery addressed to NMED and MMD as indicated in Paragraph 113.

113. Whenever one Party is required by this Agreement to submit a Document to the other Party, the Document shall be sent to the following addresses:

EPA: Gary Baumgarten
U.S. Environmental Protection Agency
1445 Ross Avenue (6SF-RA)
Dallas, Texas 75202-2733

NMED: Chief, Ground Water Quality Bureau
New Mexico Environment Department
1190 St. Francis Drive
Suite N4050
Santa Fe, New Mexico 87505

MMD: Project Manager
Mining Act Reclamation Program
Mining and Minerals Division
Energy, Mining and Natural Resources Department
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

CMI: Michael D. Coats
Project Manager
Chevron Environmental Management Company
116 Inverness Drive East, Suite 207
P.O. Box 6518
Englewood, Colorado 80155
Phone: (303) 930-4082
E-mail: michaelcoats@chevron.com

XXX. INTEGRATION/APPENDICES

114. This Agreement, its appendices and any deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), etc. that will be developed pursuant to this Agreement and become incorporated into, and enforceable under, this Agreement constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Agreement. The Parties acknowledge that there are no promises, representations, understandings or agreements relating to the settlement which are not set forth in this Agreement.

115. The following document is attached to and incorporated into this Agreement: "Appendix A" is the SOW.

XXXI. EFFECTIVE DATE

116. This Agreement is effective as of October 19, 2012. EPA shall provide Respondent with a file-stamped copy of the Agreement on or as promptly as possible after the date of filing.

So Agreed and Ordered.

For the United States Environmental Protection Agency

9-25-12
Date

Pamela Phillips
Acting Director
Superfund Division

For Chevron Mining Inc.

September 19, 2012
Date

David W. Partridge
President and Chief Executive Officer

APPENDIX A
STATEMENT OF WORK FOR
EARLY DESIGN ACTIONS

CHEVRON QUESTA MINE SUPERFUND SITE
QUESTA, NEW MEXICO
CERCLIS ID NO: NMD002899094

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
SUPERFUND DIVISION

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ATTACHMENTS

STATEMENT OF WORK FOR EARLY DESIGN ACTIONS

CHEVRON QUESTA MINE SUPERFUND SITE QUESTA, NEW MEXICO

1. INTRODUCTION

This Statement of Work (SOW) sets forth the framework and requirements for implementation of the work (Work) described in the Administrative Settlement Agreement and Order on Consent for Early Design Actions for the Chevron Questa Mine Superfund Site, Docket No. 06-13-12 (Agreement) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Chevron Questa Mine Superfund site (Site), CERCLIS ID No. NMD002899094, is depicted in Attachments 2 (Figure 1-2) and 3 (Figure 1-3) to this SOW.

2. PURPOSE

The purpose of this SOW is to set forth the framework, requirements and schedules for implementing the Early Design Actions in accordance with the United States Environmental Protection Agency's (EPA's) December 20, 2010 Record of Decision (ROD) for the Site, as further delineated in this SOW. The ROD describes EPA's Selected Remedy.

3. ROLE OF EPA

EPA will provide oversight of Chevron Mining Inc.'s (CMI's) Work. This will include the review and comment on deliverables such as work plans, reports, and other submittals related to the Early Design Actions. EPA's acceptance or approval of deliverables is administrative in nature and allows CMI to proceed to the next steps in implementing the Work. EPA's acceptance or approval does not imply any warranty of performance, nor does it imply that the Work, when completed, will meet performance standards and be accepted by EPA. Acceptance or approval of plans, reports, and other required submittals by EPA does not relieve CMI or its contractors of responsibility for the adequacy of the submittal or from their professional responsibilities. Pursuant to Section VIII of the Agreement (Performance of the Work), EPA retains the right to not accept any of the deliverables, including submittals associated with contractor selection, work plans, reports, schedules, or any other deliverables required by the Agreement, including this SOW. EPA may require that CMI submit detailed information to demonstrate that any contractor,

subcontractor, or analytical laboratory selected is qualified to conduct the Work, including information on personnel qualifications, equipment and material specifications.

CMI shall simultaneously submit copies of all deliverables to the New Mexico Environment Department (NMED) and New Mexico Energy, Minerals and Natural Resources Department's Mining and Minerals Division (MMD) for their review and comment in accordance with Section XXIX, Paragraph 112 of the Agreement. EPA will ensure that NMED and MMD have had an opportunity to comment on all deliverables before they are accepted by EPA. EPA will compile all comments, remove redundant comments, and reconcile conflicting comments prior to submittal to CMI.

CMI shall support EPA's initiation and conduct of activities related to the implementation of oversight activities.

3.1. Community Relations

EPA will conduct community relations activities throughout the Early Design Actions, including (1) developing and maintaining a community relations plan that identifies EPA's community involvement and outreach efforts and community concerns, (2) holding community meetings, (3) preparing community fact sheets to keep the community informed of ongoing Site activities, and (4) maintaining the existing Site information repositories at the Village of Questa Municipal Offices in Questa, New Mexico, the NMED office in Santa Fe, New Mexico, and the EPA Region 6 office in Dallas, Texas. CMI shall provide community relations support to EPA throughout the Early Design Actions as described in Section 6.1.9 of this SOW.

4. OVERVIEW OF EARLY DESIGN ACTIONS

Early Design Actions are to be conducted by CMI in accordance with the Agreement and the Work required by this SOW. These Early Design Actions are as follows:

4.1. Pre-Design Tailing Facility Area Ground Water Investigation

CMI shall conduct a pre-design ground water investigation of the bedrock and alluvial aquifers in the area of the Tailing Facility to further delineate the nature and extent of mine-related ground water contamination to evaluate the adequacy of the ground water component of the Selected Remedy.

4.2. Pre-Design Support Investigations for Upgrading Seepage Barriers and Well Extraction Systems

CMI shall perform pre-design ground water investigations to support the design for upgrading the seepage barriers in the area of the 002 and 003 collection systems at the Tailing Facility Area and new well extraction systems at the mouths of the mine side drainages at the Mine Site Area.

4.3. Pre-Design Borrow Characterization of Spring Gulch Waste Rock

CMI shall conduct a pre-design characterization of the proposed Spring Gulch Waste Rock Pile borrow material to further assess its suitability, when properly amended, as a non-acid generating and non-toxic cover material for the evapotranspiration (ET) cover system selected in the ROD for the waste rock piles. The borrow characterization shall consist of the following:

- Field Characterization – CMI shall measure the spatial variability of molybdenum concentrations and potential acid generation and quantify the salvageable volume of waste rock that is non-acid generating and meets the 600 milligram per kilogram (mg/kg) molybdenum borrow screening criterion specified in the ROD;

- Evaluation of Amendment/Borrow Mixtures for Achieving Water Holding Capacity – CMI shall measure the water holding capacity of Spring Gulch waste rock and then design and test amendment/borrow mixtures to meet the specific water holding capacity specified in the ROD for the ET cover system;

- Greenhouse Study – CMI shall conduct a greenhouse study using amended Spring Gulch waste rock to evaluate plant growth, plant uptake of molybdenum and direct toxicity to plants;

- Assessment of Toxicity Through a Focused Literature Review and Other Studies – CMI shall conduct a focused literature review and other studies as appropriate to assess exposure and toxicity of molybdenum to appropriate animal species through herbivory and other routes of exposure and use the plant uptake data from the greenhouse study to inform the assessment.

4.4. Remedial Design Options for Waste Rock Piles

CMI will conduct a multi-stakeholder facilitated process to develop and evaluate remedial design options. For this process, CMI will convene a technical working group (TWG) in which experts retained by EPA, NMED, MMD, and other stakeholders as appropriate will be invited to participate. The TWG will provide technical expertise to assist CMI in the

development and evaluation of design options. The TWG will provide input relating to EPA's Selected Remedy as well as the regulatory requirements and Performance Standards set forth in the ROD. The TWG will provide factual findings from that process to CMI for consideration in preparing deliverables for EPA review.

The design options assessment process will consist of the following general steps, each of which will be carried out in an iterative manner by CMI with the participation of the TWG and each of which will result in a draft deliverable to be submitted by CMI to EPA for review: (1) Development of general design guidelines and parameters; (2) development of preliminary design options (at a conceptual level) for the roadside waste rock piles; and (3) development of integrated design options (at a conceptual level) for all of the waste rock piles and any necessary waste rock repositories. The design options assessment process is described in detail in Section 6.6 of this SOW.

4.5. Group 1 Waste Rock Pile Pilot Project

CMI shall conduct a pilot project on the Goathill North Waste Rock Pile. This waste rock pile shall comprise the first waste rock pile group (Group 1) referenced in the ROD. This project serves as a pilot design project because it is the first waste rock pile to be addressed and information obtained from the project will be used in subsequent waste rock pile remediation designs. The pilot project also will be designed to be a complete remediation project for the Goathill North Waste Rock Pile. If at any time before construction the parties obtain information indicating the Goathill North Waste Rock Pile is not the best option for the pilot project, the parties may agree to select a different waste rock pile for the pilot project.

CMI shall conduct the pilot project to test a range of construction methods, engineering concepts, or specific design elements for the waste rock piles at a field scale. The pilot project shall include an examination of the practicality, effectiveness and constructability of the methods or design concepts that are developed by CMI with the assistance of the facilitated TWG process. The pilot project shall also include studies to identify appropriate cover design parameters and specifications. The pilot project shall be conducted to establish optimal design specifications and performance criteria to meet Performance Standards and ARARs, including a performance criterion to be developed during the remedial design phase that will focus on reducing net percolation through the non-acid generating cover system to a level that would allow attainment of ground water remediation goals and be protective of ground water.

The pilot project shall also include without limitation the determination of optimal cover and revegetation design specifications for promoting vegetative growth, protecting wildlife, and minimizing erosion and long-term slope maintenance. The project shall evaluate types, application methods, and application rates of amendments. Any need for multiple applications of amendments to promote vegetative growth once the cover is in place shall also be assessed.

The suitability of the cover material used in the Group 1 Waste Rock Pile pilot project, whether it be amended Spring Gulch waste rock that is selected based on the results of the Borrow Characterization described in Section 4.3 above or another borrow source, will be verified by field testing during such pilot project. Field testing shall include testing plant tissue for metals uptake, analysis of closely co-located samples of the amended waste rock material, and tracking of plant mortality and vigor over time.

4.6. Pre-Design Treatability Studies for Water Treatment

CMI shall conduct treatability studies to evaluate the performance of water treatment technologies as selected in the ROD and develop design criteria for the water treatment plants that, according to the ROD, are to be built and operated at the Mine Site Area and Tailing Facility Area. The treatability studies shall provide sizing and operations criteria to be used in design drawings and specifications and in the engineer's cost estimate to optimize the remedial design. As stated in Section 12 of the ROD, efficiencies may be determined in treatment system processes, locations, and sizing that result in cost savings for construction and operation and maintenance (O&M) of the water treatment systems and reduce ongoing O&M and treatment residuals disposal with respect to these systems.

5. PERFORMANCE STANDARDS

Performance Standards for the Work are the standards by which EPA will determine whether CMI's Work has been satisfactorily completed. Performance Standards include, but are not limited to, the remedial action objectives (RAOs) and remediation goals set forth in Section 8.0 of the ROD that are applicable to the Early Design Actions or other measures of achievement as defined in the ROD, the Agreement, this SOW and other EPA-approved submittals. They are also based on the standards, standards of control, and other substantive requirements, criteria and limitations representing ARARs set forth in the ROD.

5.1. Remedial Action Objectives

RAOs were developed for the five areas to be addressed by the Selected Remedy to protect human health and the environment. They provide general descriptions of the objectives of the cleanup. They are media-specific goals that specify the contaminants of concern (COCs), exposure routes and receptors, and an acceptable contaminant level or range of levels for each exposure route (*i.e.,* remediation goals). The RAOs are established on the basis of the nature and extent of the contamination, the resources that are currently and potentially threatened, and the potential for human and environmental exposure.

5.2. Remediation Goals

Remediation goals are media-specific, quantitative goals that define the extent of cleanup required to achieve the RAOs. They are based primarily on health or ecological criteria developed by EPA in risk assessment or federal and State of New Mexico (State) numeric criteria or standards identified by EPA to be ARARs for the Site. These goals represent the cleanup levels set forth in the ROD for the COCs targeted in each medium being addressed by the Selected Remedy. The remediation goals in the ROD also serve as a design basis for the remedial design and remedial action.

6. WORK TO BE PERFORMED

CMI shall perform the Work necessary to complete the Early Design Actions which are part of the Selected Remedy set forth in the ROD and as defined in the Agreement and Section 4 of this SOW. The Work includes (1) pre-design ground water investigation at the Tailing Facility Area, (2) pre-design support investigations for upgrading the seepage barriers in the area of the 002 and 003 collection systems at the Tailing Facility Area and new well extraction systems at the mouths of the mine side drainages at the Mine Site Area, (3) pre-design borrow characterization of Spring Gulch waste rock, (4) preliminary remedial design options for the waste rock piles, (5) Group 1 Waste Rock Pile remedial design pilot project, and (6) pre-design treatability studies for water treatment.

6.1. General Requirements

The following general requirements shall be met by CMI when performing the Work:

6.1.1. Deliverables

All plans, reports and other deliverables required by the Agreement or this SOW shall be submitted to EPA, NMED and MMD in accordance with the Agreement, including Section VIII (Performance of the Work). CMI shall prepare pre-design and design documents in order to implement the Early Design Actions set forth above. Deliverables being submitted for meetings shall be submitted five working days in advance of the meeting to EPA, NMED, MMD and other stakeholders as appropriate, to allow for review prior to the meeting, unless otherwise agreed by the Project Coordinators.

6.1.2. Document Distribution

CMI shall submit a minimum of one hard copy of all plans, reports, and other major deliverables to each of the following: the EPA Project Coordinator, the EPA Oversight Contractor, and the NMED and MMD project coordinators. In addition, CMI shall maintain a SharePoint site on which it will make available to EPA, NMED, and MMD electronic copies of all such documents in both MS Office® (Word®, Excel®, Project®,

etc.) and a portable document format (pdf) in the format provided by EPA or as specified herein. The number of actual copies required by EPA, NMED and MMD will periodically be reassessed throughout performance of the Early Design Actions by the EPA Project Coordinator, and CMI shall be notified if additional or fewer copies are needed. If requested, additional electronic copies and/or hard copies of final submissions shall also be provided to other key stakeholders (*e.g.,* Village of Questa, Taos County, U.S. Forest Service, Amigos Bravos, and other interested non-governmental organizations) as well as other EPA technical consultants and regulatory officials as directed by EPA.

6.1.3. Personnel, Materials and Services

CMI shall furnish all necessary and appropriate personnel, materials, and services needed for, or incidental to, performing and completing the Early Design Actions.

6.1.4. Communication

The Project Coordinator for CMI shall communicate at least weekly with the EPA Project Coordinator, either in face-to-face meetings, through conference calls, or through electronic mail, unless otherwise agreed to in writing. The NMED and MMD Project Coordinators shall be invited to participate in those meetings or calls and shall be copied on emails. CMI shall document all decisions that are made in those meetings and conversations. CMI shall forward this documentation, which may be in the form of an email, to EPA, NMED, and MMD within five working days of the meeting or conversation.

6.1.5. Monthly Progress Reports

CMI shall prepare and send to EPA monthly progress reports to document the status of the Work, beginning in the month following the Effective Date of the Agreement and ending with the month following completion of the Work set forth under the Agreement and this SOW. CMI shall provide copies of the monthly progress reports to NMED and MMD.

6.1.6. Attendance at Meetings

CMI shall attend periodic project meetings as requested by EPA, unless otherwise agreed to in writing or through e-mail. Such meetings and events shall be attended by at least one representative of EPA, EPA's Oversight Contractor, NMED and/or MMD, if practicable. All meetings, site visits, and conference call meetings shall be coordinated by CMI with EPA, NMED, and MMD Project Coordinators. CMI shall also attend all Work-related meetings at the Site with EPA, unless otherwise agreed in writing or through e-mail. CMI shall provide documentation of all meeting results to EPA within 5 working days following the meeting.

CMI shall invite EPA, NMED and MMD to each weekly project meeting it holds with its contractors and subcontractors in the field.

6.1.7. Retention of Records

CMI shall maintain all technical and financial records for the Early Design Actions in accordance with Section XII of the Agreement (Record Retention).

6.1.8. Field Operation Office and Equipment

The requirements of this paragraph may be met through compliance with the corresponding requirements of the *In re Chevron Mining Inc.*, Administrative Settlement Agreement and Order on Consent for Removal Actions, Appendix A – Statement of Work for Removal Actions. CMI shall provide office space for the EPA Project Coordinator and EPA authorized oversight officials/contractors, as well as NMED and MMD personnel, at the Site if CMI or its contractors have office space at the Site. If no office space is established at the Site, CMI shall provide office space for the EPA Project Coordinator, EPA-authorized oversight officials/contractors, and NMED/MMD personnel in proximity to CMI's field-operation office near the Site. Minimum office requirements shall include an air-conditioned, heated, well-lighted, private office, two office desks with chairs, one four-drawer file cabinet, a telephone with a private line, and Internet access. In addition, CMI shall provide access to a facsimile transmission machine, a photocopier, and sanitation facilities. CMI shall also provide the field operation office with a refrigerator, a table to review full sized drawings, and other reasonable accessories needed to conduct oversight activities. CMI shall provide the field operation office space and equipment no later than one week prior to the start of field activities. CMI shall notify EPA in writing upon completion of these field support activities.

6.1.9. Community Relations Support

CMI shall provide the following community relations support to EPA throughout the Early Design Actions:

6.1.9.1. Attendance at Community Relations Events

CMI and its contractors shall attend community meetings as requested by EPA, unless otherwise agreed to in writing or through e-mail.

6.1.9.2. Logistics and Presentation Support

CMI shall help EPA in selecting and reserving meeting space for EPA to hold community meetings, as well as the logistics for such events. This includes helping to set up the seating arrangements, tables, presentation equipment, and any visual displays and then take down such arrangements after the meetings. CMI shall also prepare presentation materials/handouts (i.e., transparencies, slides, and/or handouts) as instructed by EPA. Such materials/handouts shall be approved by EPA before distribution or use.

6.1.9.3. Technical Support

CMI shall provide technical support for community relations, including community meetings. This support may include preparing technical input to news releases, briefing materials and other community relations vehicles, arranging for Site tours upon request, and helping EPA to coordinate with local agencies as requested.

6.1.9.4. Fact Sheet Preparation Support

CMI shall help EPA prepare fact sheets that inform the public about activities related to the Early Design Actions, schedules for the Early Design Actions, field investigations, construction, measures to be taken to protect the community, provisions for responding to emergency releases and spills, any potential inconveniences such as excess traffic and noise that may affect the community during Early Design Actions, and other topics as required by EPA. EPA will determine the final content of all fact sheets related to the Work.

6.1.9.5. Information Repository Support

CMI shall support EPA in maintaining the Site information repositories by providing hard and/or electronic copies of all Early Design Action documents to the repositories as directed by EPA. CMI shall periodically visit the Questa repository at EPA's request to verify that Site-related documents are being maintained and available for review by the public.

6.2. Project Planning and Scoping

CMI shall perform the activities described below as part of project planning and scoping for the Work. In light of the multiple areas and various types of pre-design and design Work, planning and scoping activities shall be required for the Early Design Actions, including attendance at scoping meetings, conducting Site visits, and the preparation of Early Design Action work plans and schedules.

The preparation of the Overall Site Plan and detailed work plans is described below. During scoping meetings, CMI and EPA may agree to reduce the number of plans or reports that would be developed for each of the Early Design Actions. In many cases, existing plans prepared as part of the Early Design Actions may be updated or modified for a subsequent element of this Work. Plans or reports that are duplicative may be deleted if agreed to by EPA.

6.2.1. Attend Scoping Meetings

Scoping meetings shall be scheduled for each Early Design Action, as appropriate. A scoping meeting may address more than one Early Design Action. CMI shall contact the EPA Project Coordinator within three (3) working days after the Effective Date of the

Agreement to schedule the first scoping meeting. The first scoping meeting shall be held no later than 30 days after the Effective Date of the Agreement, unless otherwise agreed to by the Project Coordinators. CMI and its principal contractors shall attend all scoping meetings. The scoping meetings are to be held at locations to be determined by the EPA Project Coordinator and may include the EPA Region 6 Office in Dallas, TX, or the NMED or MMD offices in New Mexico.

6.2.2. Conduct Site Visits

CMI shall conduct Site visits during project planning and scoping, as appropriate, to develop a conceptual understanding of how the Work will be accomplished (*e.g.,* field observation of sampling locations or borehole drilling locations). Information gathered during the visits shall be used to better scope the Work and to help determine the extent of additional data requirements.

The Site Health and Safety Plan (HASP) must be updated and located on Site before any Site visits can be conducted (*see* Section 6.2.8 below).

6.2.3. Evaluate Existing Data and Documents

CMI shall evaluate existing data and documents, including the ROD, Final RI Report, Final FS Report (Revision 3), and other data and documents (e.g., New Mexico ground water discharge permits and mining permits or NPDES permits) as needed to prepare work plans.

6.2.4. Develop Draft Work Plans

CMI shall prepare and submit to EPA for approval the work plans for the Early Design Actions. The work plans to be submitted are as follows:

- Work Plan for Pre-Design Ground Water Investigation at the Tailing Facility Area;
- Work Plan for Pre-Design Investigations to Upgrade Seepage Barriers and Well Extraction Systems;
- Work Plan for Pre-Design Borrow Characterization of Spring Gulch Waste Rock;
- Work Plan for Group 1 Waste Rock Pile Pilot Project; and
- Work Plan for Pre-Design Treatability Studies on Water Treatment.

The scope of each of these work plans are described in detail in subsequent sections of this SOW. The required schedules for submitting each work plan are also discussed in those subsequent sections.

6.2.4.1. Work Plan Elements

The work plans shall also include without limitation the following information:

- a comprehensive description of project tasks, the procedures to accomplish them, project documentation, and project schedule;
- a statement of any problems and potential problems posed and how the objectives of the completed Work will address the problems;
- the technical approach and design for the Work to be performed including a detailed description of each activity, the assumptions used, the information needed for each activity, any information to be produced during and at the conclusion of each activity, and a description of the Work products that will be submitted to EPA;
- the details of planned field sampling, including sampling objectives, sampling media, sampling locations, depths and frequency, sampling equipment and procedures, sample handling, analytical methods, analytical parameters and constituents, and a breakdown of samples to be analyzed through Contract Laboratory Program (CLP) and other sources, as well as the justification for those decisions; tables of geographic coordinates and the appropriate maps showing locations of previous sampling locations and proposed sampling locations; and
- schedules identifying specific dates for completion of each required activity and submission of each deliverable described in the work plans as well as information about timing, initiation, and completion of all critical path milestones for each activity and deliverable and the expected review time for EPA.

6.2.5. Project Organization and Responsibilities

The work plans shall include an organizational structure which outlines the responsibilities and authority of all organizations and key personnel involved in the Work, as appropriate for each Early Design. The work plans shall also include the curricula vitae or resumes of CMI's proposed contractors, subcontractors and their key personnel. Selection of any engineer, contractor, or subcontractor shall be subject to approval by EPA. While EPA approval is not required for the stakeholder technical experts participating in the TWG, CMI will consult with EPA regarding the technical qualifications of any expert proposed by a stakeholder.

6.2.6. Early Design Actions Project Schedule

Within 30 days of the Effective Date of the Agreement, CMI shall submit a draft "Early Design Actions Project Schedule" (Project Schedule) to EPA for approval, with copies to NMED and MMD. CMI shall prepare the Project Schedule based on the time periods set forth in the Agreement and this SOW. The Project Schedule shall specify time periods for completion of each required activity and submission of each deliverable required by the

Agreement and this SOW, including the TWG-facilitated process for developing and assessing waste rock pile design options.[1]

CMI shall update the Project Schedule as needed, and as agreed upon, by the Project Coordinators. The schedule and all updates shall be submitted to EPA, NMED, and MMD as hard copies and electronic copies in Microsoft® Project® and pdf formats.

6.2.7. Overall Site Plan

CMI has the overall responsibility to prepare, update, and maintain an Overall Site Plan for implementation of the Early Design Actions. This Overall Site Plan is defined below and includes some Site-wide plans. Information specific to each Early Design Action will be included in the individual work plan for the respective Early Design Action, as necessary, because of the significant differences in characteristics, field conditions, and nature of the Work. Many of the plans identified herein are to be prepared or updated as part of the Removal Actions and, therefore, may be acceptable for this Work with minimal revision or modification. Others may have been prepared as part of the CERCLA RI/FS. CMI shall review the existing plans or those to be prepared for the Removal Actions and update or modify, as necessary, for the pre-design and design Work. Plans not being prepared for the Removal Actions, but needed to implement these Early Design Actions, shall be prepared by CMI. Any existing plans that do not require revision for this Work shall be referenced or incorporated into the appropriate plans for this Work. Since CMI's contractors or subcontractors may prepare their own plans, CMI will incorporate such plans into the Overall Site Plan submitted to EPA for approval in accordance with the Agreement and this SOW.

CMI shall submit a draft of the Overall Site Plan to EPA for approval within 90 days of the Effective Date of the Agreement.

CMI shall revise the Overall Site Plan to address all EPA comments. The revised Overall Site Plan shall be submitted to EPA for approval within 30 days after receipt of EPA comments.

CMI shall periodically reassess and update the Overall Site Plan as necessary, to take into account the different areas or conditions of the Site where Work is being performed or the nature of the Work.

The Overall Site Plan shall consist of the following components described in Sections 6.2.7.1. through 6.2.7.4. Each of those "plans" may be a section of the Overall Site Plan, rather than a separate document.

[1] EPA recognizes that the timeframes for completing some of the TWG-facilitated activities will be beyond CMI's control due to scheduling and other issues and that additional TWG meetings may be productive; therefore, specified schedules may need to be revised.

6.2.7.1. Site Management Plan

CMI shall prepare a "Site Management Plan" (SMP) that provides EPA with a written understanding of how ingress/egress, security, contingency procedures, management responsibilities, and waste disposal are to be handled during all pre-design and design activities.

6.2.7.1.1. Pollution Control and Mitigation Plan

The SMP shall include a "Pollution Control and Mitigation Plan" (PCMP) that outlines the process, procedures, and safeguards that will be used to ensure hazardous substances, contaminants or pollutants are not released off Site.

6.2.7.1.2. Waste Management Plan

The SMP shall include a "Waste Management Plan" (WMP) that outlines how wastes that are encountered during the Early Design Actions will be managed and disposed. CMI shall specify the procedures that will be followed when wastes are managed, including on-Site and off-Site storage, treatment, and/or disposal.

6.2.7.1.2.1. Decontamination Plan

A "Decontamination Plan" that describes the equipment and methods that shall be used for decontamination procedures shall be included in the WMP.

6.2.7.1.2.2. Water Control Plan

A "Water Control Plan" that addresses methods for collection, treatment, disposal or discharge of decontamination water, dust control water, storm water, and other surface water shall be included in the WMP.

6.2.7.2. Sampling and Analysis Plan

CMI shall prepare a "Sampling and Analysis Plan" (SAP). The SAP shall be written to reflect the specific objectives of any data acquisition to be conducted for the Early Design Actions. The SAP shall outline the data collection and quality assurance requirements of any sampling and analysis conducted by CMI. It shall be designed in a manner that ensures that sample collection and analytical activities are conducted in accordance with technically acceptable protocols, as determined by EPA, and that the data meet data quality objectives (DQOs). The SAP shall include laboratory analyses for all COCs identified in the ROD for the appropriate media, including Target Analyte List (TAL) metals, molybdenum, fluoride,

uranium, pH, total dissolved solids (TDS), sulfate, and other inorganic chemicals as appropriate. The SAP provides a mechanism for planning field activities.

6.2.7.2.1. Quality Assurance Project Plan

CMI shall update or prepare a "Quality Assurance Project Plan" (QAPP) as part of the SAP. The QAPP shall be prepared in accordance with EPA QA/R-5 (latest draft or revision). The QAPP shall describe the project objectives and organization, functional activities, and quality assurance/quality control (QA/QC) protocols that shall be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytical methods for identifying and remediating contamination consistent with the levels for the RAOs and cleanup levels set forth in the ROD. The QAPP shall address sampling procedures, sample custody, analytical procedures, and data reduction, validation, reporting and personnel qualifications.

6.2.7.2.2. Field Sampling Plan

CMI shall prepare a "Field Sampling Plan" (FSP) as part of the SAP that defines the sampling and data collection methods that shall be used for Early Design Actions. This includes the pre-design ground water investigation at the Tailing Facility Area, the design support investigation to upgrade the seepage barriers in the area of the 002 and 003 collection systems at the Tailing Facility Area and new well extraction systems at the mouths of the mine side drainages at the Mine Site Area, the pre-design borrow characterization of Spring Gulch waste rock at the Mine Site Area, the pilot project for the Group 1 Waste Rock Pile, and treatability studies for water treatment. Since specific field sampling details will vary for each Early Design Action, they will be included in the work plans for each Early Design Action (*see* Section 6.2.4.1. above). Either the FSP or the work plan for an individual Early Design Action shall include a description of how investigation-derived waste will be managed.

6.2.7.2.3. Data Management Plan

CMI shall prepare a "Data Management Plan" that outlines the procedures for storing, handling, accessing, retaining and securing data collected during performance of the Work. CMI shall consistently document the quality and validity of all field and laboratory data compiled. All data compiled shall be electronically supplied to EPA in ArcView® format or other electronic format as directed by EPA in accordance with the Data Management Plan. All GIS data sets shall be in a UTM or State Plane coordinate system.

6.2.7.2.4. Field Logs

CMI shall maintain written daily field log books as the primary record for field investigation, characterization, and other data acquisition activities. These log books will contain all measurements and observations as directly recorded in the field or study environment, and entries regarding:

- all field measurements, including pH, temperature, conductivity, water flow, air quality parameters, and soil, waste rock and tailing characteristics;
- processes and methods followed to implement approved plans;
- health and safety monitoring performed by CMI pursuant to the health and safety plan;
- written entries describing sampling locations, their geographical coordinates, sampling techniques, and a general description of CMI's daily activity; and
- any unusual occurrences, circumstances or difficulties.

CMI shall record data directly and legibly in field log books with entries signed and dated by CMI or its contractors. Original written field log book entries may not be obscured when CMI makes changes in written log book entries, and CMI or its agent will sign and date any changes. CMI shall use standard format information sheets for its written daily log entries.

6.2.7.3. Contingency Plan

CMI shall prepare a "Contingency Plan" that will provide contingency measures for potential spills and discharges from materials handling or transportation. The Contingency Plan shall describe methods, means, and facilities required to prevent contamination of soil, water, atmosphere, uncontaminated structures, equipment or material from the discharge of waste due to spills. CMI shall provide for equipment and personnel to perform emergency measures required to contain a spill and to remove and properly dispose of any media that become contaminated due to spillage, and provide for equipment and personnel to perform decontamination measures that may be required to remove spillage from previously uncontaminated structures, equipment, or material. CMI shall include the name and telephone number of the person that is responsible for responding in the event of an emergency situation or incident. The Contingency Plan shall include a "Spill Prevention, Control and Countermeasures Plan" as specified in 40 CFR Part 112.

6.2.7.4. Construction Quality Assurance Project Plan

CMI shall prepare a draft "Construction Quality Assurance Project Plan" (CQAPP) for the Group 1 Waste Rock Pile pilot project. The CQAPP shall be prepared in accordance with "Construction Quality Assurance for Hazardous Waste Land

Disposal Facilities" (EPA, October, 1986). It shall detail the approach for quality assurance by addressing quality assurance requirements and standards related to construction activities, including installation, excavation, and decontamination. At a minimum, the draft CQAPP shall include the following elements:

6.2.7.4.1. Personnel

Responsibility and authority of all organization and key personnel to be involved with remedial construction activities shall be provided, including an organizational chart.

6.2.7.4.2. CQAPP Personnel Qualifications

In the draft Pilot Project Work Plan described in Section 6.7.2.4 of this SOW, CMI shall notify EPA in writing of the name, title, address, telephone number and qualifications of its proposed Quality Assurance Official or Officials (QA Official(s)) who will conduct the quality assurance program as specified in the EPA-approved Quality Management Plan (*see* Section VII of the Agreement (Designation of Contractors and Project Coordinators)). Minimum qualifications of the QA Official(s) and supporting inspection personnel shall be provided. The QA Official(s) shall be responsible for assuring that the Early Design Action pilot project is constructed to meet construction quality assurance project requirements. The QA Official(s) shall implement the CQAPP by reviewing test information and inspecting the work performed by CMI's construction contractors. Certain specifications of the quality assurance program are set forth in Section VIII, Paragraph 33 of the Agreement (Quality Assurance and Sampling). As part of this notification, CMI shall certify to EPA in writing that the proposed QA Official(s) is/are unaffiliated with, and "independent" from, CMI's construction contractors. EPA's acceptance will be based on professional and ethical reputation, previous experience in the type of quality assurance activities to be implemented and demonstrated capability to perform the required activities. Additionally, EPA's acceptance will be based on the requirement of independence between the QA Official(s) and the construction contractors.

After receiving CMI's notice regarding the QA Official(s), as described in the preceding paragraph, EPA will issue a notice of disapproval or an authorization to proceed regarding the QA Official(s). If at any time thereafter, CMI proposes to replace a QA Official(s), CMI shall give written notice, including the name, title, address, telephone number, and qualifications of the newly proposed QA Official(s), to EPA, and CMI must obtain authorization to proceed from EPA before the new QA Official(s) performs, directs, or supervises any Work to be performed under the Agreement and this SOW.

6.2.7.4.3. Inspection Activities

Inspection activities shall be described, including observations and tests necessary to monitor and certify completion of construction and installation work. The scope and frequency of each type of inspection to be conducted shall be specified. Inspections shall be required to verify compliance with environmental and permitting requirements and include without limitation air quality and emissions monitoring records, and waste disposal records. Inspections shall also ensure compliance with all health and safety procedures described in the HASP.

6.2.7.4.4. Sampling Requirements

Requirements shall be included for sampling activities, sample size, sample locations, frequency of testing, criteria for acceptance and rejection, and plans for correcting problems as addressed in the project specifications.

6.2.7.4.5. Documentation

Reporting requirements shall be described for all CQAPP activities. This shall include such items as daily logs, summary reports and inspection data sheets.

6.2.8. Health and Safety Plan

Within 30 days of the Effective Date of the Agreement, CMI shall update the existing HASP for this Work, as appropriate, in conformance with applicable Mine Safety and Health Administration (MSHA)[2], Occupational Safety and Health Administration (OSHA), and EPA requirements, including, but not limited to, 29 C.F.R. § 1910. EPA shall not approve or disapprove the HASP, but shall review it to assure its existence and shall require compliance by CMI with its terms as part of the Agreement.

The HASP shall specify employee training, protective equipment, medical surveillance requirements, and standard operating procedures, and include an Emergency Response Plan in accordance with 40 C.F.R. § 300.150 of the NCP and 29 C.F.R. §§ 1910.120 1(1) and (1)(2). A task-specific section of the HASP shall also be included to address health and safety requirements for Site visits. Since the Site is an operating mining facility, the HASP shall identify health and safety requirements specified under MSHA for Site visitors. The Emergency Response Plan describes how to handle emergencies at the Site and minimize risks associated with a response. This response plan should be reviewed and rehearsed regularly, and a copy should be provided to local emergency response facilities.

[2] Conformance with MSHA requirements shall be for that portion of the Site on CMI property.

6.2.9. Data Acquisition, Analysis, Validation and Evaluation

In scoping and preparation of all pre-design and design work plans, CMI shall determine what Site environmental data are needed to perform the Work. CMI shall evaluate existing data to determine what additional data are necessary, including data for:

(1) the pre-design ground water investigation at the Tailing Facility Area,

(2) the pre-design support investigation to upgrade seepage barriers in the area of the 002 and 003 collection systems at the Tailing Facility Area and new well extraction systems at the at the mouths of the mine side drainages Mine Site Area,

(3) the pre-design borrow characterization of the Spring Gulch waste rock at the Mine Site Area to assess the quantity of material that is non-acid generating and passes the 600 mg/kg borrow screening criterion for molybdenum, the water holding capacity of unamended and amended Spring Gulch material, and the potential toxicity of amended material to greenhouse-grown plants and appropriate animal species,

(4) the Group 1 Waste Rock Pile pilot project for testing and monitoring a range of design parameters and criteria related to cover, amendment types and application, revegetation, and monitoring metals uptake into vegetation, and

(5) the pre-design treatability studies for water treatment.

CMI shall determine the data requirements for conducting all performance monitoring and other monitoring required by this SOW. CMI shall propose DQOs for the required data consistent with "Guidance for the Data Quality Objectives Process," EPA/600/R96/055, QA/G4, August 2000.

Additional data requirements may be identified by CMI or EPA at any time throughout the Early Design Actions. Whenever such requirements are identified by CMI, it shall submit to EPA for approval a technical memorandum documenting the need for the additional data and identifying potential updates to the DQOs, if necessary. If EPA determines that data are needed in addition to those data proposed by CMI, EPA shall notify CMI in writing. CMI shall be responsible for fulfilling the additional data and analysis needs identified by EPA consistent with the general scope and objectives of this SOW.

CMI shall perform the following data acquisition, sample analysis, validation, and evaluation activities:

6.2.9.1. Data Acquisition

CMI shall acquire environmental samples and other data that are required to perform the Early Design Actions. CMI shall perform field activities or a combination of activities described below for data acquisition in accordance with

the EPA-approved FSP and QAPP. Before beginning significant phases of field activities, EPA, NMED, MMD, and CMI shall hold an initial meeting with all principal personnel to clarify objectives, communication channels, and related matters. CMI shall notify EPA, NMED and MMD at least 10 days before sampling events are planned, so that inspections of the sampling procedures may be arranged.

6.2.9.1.1. Mobilization and Demobilization

CMI shall provide the necessary personnel, equipment, and materials for mobilization and demobilization to and from the Site for the purpose of conducting the required sampling programs. The following mobilization and demobilization work shall be performed:

- identify field support equipment, supplies and facilities;
- mobilization;
- site preparation;
- installation of utilities;
- construction of temporary utilities; and
- demobilization.

6.2.9.1.2. Field Investigation

CMI shall conduct environmental sampling as needed for the pre-design and design activities discussed below. All field sampling personnel shall have adequate training and field experience to perform field sampling procedures and techniques in accordance with the QAPP and FSP. EPA may require that CMI submit detailed information to demonstrate that all field sampling personnel are qualified to conduct the sampling, including information on personnel qualifications such as training and experience.

6.2.9.2. Sample Analysis

CMI shall arrange for the analysis of environmental samples collected during the previous task. CMI shall, as needed and consistent with Section VIII, Paragraph 33 of the Agreement (Quality Assurance and Sampling), perform the following activities or combination of activities to analyze test results:

- Contract Laboratory Program (CLP)-Type Laboratory Sample Analysis;
- CMI shall submit qualifications of the proposed analytical laboratory(ies) in advance to demonstrate to EPA's satisfaction that each laboratory is qualified to perform the analytical work;

- All laboratories will use methods and analytical protocols for the analytes in the media of interest within detection and quantification limits consistent with EPA QA/QC procedures and with DQOs accepted in the QAPP for the Site by EPA;
- All laboratories will have and follow an approved QA program;
- If a laboratory not in the CLP is selected, methods consistent with CLP methods that would be used for the purposes proposed and QA/QC procedures accepted by EPA will be used; in addition, a laboratory QA program will be submitted for EPA review and approval, and the laboratory's EPA proficiency tests for waste water and drinking water for at least the previous two years will be submitted to EPA;
- EPA may require that CMI submit detailed information to demonstrate that any laboratory used is qualified to conduct the analytical work, including information on personnel qualifications, equipment and material specifications; and
- CMI shall provide EPA and its contractors with unlimited access to laboratory personnel, equipment and records related to sample collection, transportation and analysis.

6.2.9.3. Analytical Support and Data Validation

CMI shall arrange for the validation of environmental samples collected during the previous task. CMI shall perform appropriate data validation to ensure that the data are accurate and defensible. CMI shall perform the following activities or combination of activities to validate test results:

- prepare and ship environmental samples in accordance with the FSP and QAPP;
- implement EPA-approved laboratory QA program;
- provide sample management (chain-of-custody, sample retention, and data storage) to ensure proper management of samples and accurate chain-of-custody procedures for sampling tracking, protective sample packing techniques, and proper sample-preservation techniques;
- coordinate with appropriate sample management personnel; and
- validate the quality of the data, the accuracy of the data, and the chain-of-custody.

6.2.9.4. Data Evaluation and Reporting

CMI shall organize and evaluate existing data and data gathered during previous tasks that will be used in the Early Design Actions. CMI shall evaluate the usability of the data collected. CMI may use data from any samples collected or testing performed prior to the Effective Date in support of the Early Design Actions, as long as the samples were collected or testing was performed in a manner consistent with the substantive requirements of Section 6.2.9 of this SOW pertaining to data

quality. CMI shall evaluate, interpret, and tabulate data in an appropriate presentation format for final data tables. CMI shall design and set up an appropriate database for pertinent information collected that will be used during the Early Design Actions. CMI shall notify EPA in advance of any computer modeling it proposes to use and obtain EPA approval before such use.

CMI shall evaluate and present results in a "Data Evaluation Summary Report" and submit the report to EPA for approval. The Data Evaluation Summary Report shall be included in the pre-design and design reports.

6.3. Pre-Design Ground Water Investigation at the Tailing Facility Area

6.3.1. Pre-Design Work Plan for the Ground Water Investigation at the Tailing Facility Area

Within 90 days after the Effective Date of the Agreement, CMI shall prepare and submit to EPA for approval a "Pre-design Work Plan for the Ground Water Investigation at the Tailing Facility Area." The work plan shall include those elements specified in Section 6.2.4.1 of this SOW. This work plan shall include a description of all tasks to be conducted for further characterizing the extent of ground water contamination from the tailing facility. Such investigation shall include portions of the Guadalupe Mountains and the Red River Gorge to define the extent and nature of contamination to evaluate the adequacy of the ground water component of the Selected Remedy. The work plan shall also include a schedule for completing the tasks. The schedule shall include specific dates for each task and subtask, including the expected review times for EPA.

The Tailing Facility Area investigation shall be designed to include without limitation the identification of transport pathways and fate of tailing water seeping from the tailing facility. The work plan shall also be designed to delineate the vertical and horizontal extent of ground water COCs (*e.g.,* molybdenum, uranium, manganese and sulfate). The work plan shall include equipotential and isoconcentration maps of molybdenum, uranium, manganese, sulfate and other COCs as appropriate in the alluvial and basal bedrock (volcanic) aquifers that are updated based on, without limitation, the most current ground water quality monitoring data collected and reported under New Mexico Ground Water Discharge Permit DP-933. The work plan shall specify that the tailing facility water balance calculations prepared for the RI/FS shall be updated, as appropriate, based on the new information collected by this additional investigation.

The work plan shall describe the proposed additional ground water monitoring wells, including a well to replace former piezometer TPZ-5B. The work plan shall also include a map showing well locations and total depths, as well as the subsurface data to be collected to further delineate the extent of ground water contamination. Hydrogeologic cross sections shall be included in the work plan depicting existing wells and the proposed wells, aquifers, and COC concentrations (*e.g.,* molybdenum, uranium, manganese and sulfate).

CMI shall revise the draft work plan to address all EPA comments. A revised work plan shall be submitted to EPA for approval within 30 days after receipt of EPA comments.

Upon EPA approval of the work plan and schedule, they shall become enforceable parts of the Agreement.

6.3.2. Pre-Design Investigation of Tailing Facility Area Ground Water

Upon receipt of EPA's written approval of the Pre-Design Work Plan for the Ground Water Investigation at the Tailing Facility Area, CMI shall commence the ground water investigation in accordance with the approved work plan and schedule. CMI shall provide EPA, NMED, and MMD a minimum 10-day advance notice of the start of field activities. CMI shall provide the agencies with updates and progress reports by telephone during all drilling, well construction, aquifer testing and well sampling activities as part of the communication discussed in Section 6.1.4.

Based on the results of the drilling program and/or well testing data, CMI may propose, or EPA may require, at any time during the investigation, the installation of additional monitoring wells to meet the objectives of the investigation.

6.3.3. Pre-Design Report for the Ground Water Investigation at Tailing Facility Area

CMI shall prepare and submit to EPA for approval a draft "Pre-Design Ground Water Investigation at the Tailing Facility Area Report" in accordance with the EPA-approved schedule. The draft report shall include all analytical results and an interpretation of the data, including updated isoconcentration maps of molybdenum, sulfate, uranium and other COCs, as appropriate, and updated north/south and east/west geologic cross sections that depict subsurface information collected from the new wells. The draft report shall also include an update to the RI/FS water balance calculations for the tailing facility, as appropriate.

The draft report shall include without limitation the following:

- Summary of the objectives and requirements described in the approved work plan;
- Summary of the Work completed;
- Identification of vendors and equipment used;
- Boring logs and well construction diagrams;
- Well and analytical data;
- Issues and problems encountered during the investigation;
- Results and conclusions; and
- Documentation of completion of the Work and the date of completion.

CMI shall revise the draft report to address all EPA comments. The revised report shall be submitted to EPA for approval within 30 days after receipt of EPA comments.

6.4. Pre-Design Support Investigations for Upgrading Seepage Barriers and Well Extraction Systems

6.4.1. Pre-Design Work Plan for Investigations to Upgrade Seepage Barriers and Well Extraction Systems

Within 90 days after the Effective Date of the Agreement, CMI shall prepare and submit to EPA for approval a draft "Pre-Design Work Plan for Investigations to Upgrade Seepage Barriers and Well Extraction Systems." The work plan shall include those elements specified in Section 6.2.4.1 of this SOW. This work plan shall describe the tasks for conducting additional investigations to support the design for upgrading the seepage barriers in the area of the 002 and 003 collection systems at the Tailing Facility Area and new well extraction systems at the mouths of the mine side drainages at the Mine Site Area. The work plan shall also include a schedule for completing the tasks. The schedule shall include specific dates for each task and subtask, including the expected review times for EPA.

CMI shall revise the draft work plan to address all EPA comments. The revised work plan shall be submitted to EPA for approval within 30 days after receipt of EPA comments.

Upon EPA approval of the work plan and schedule, they shall become enforceable parts of the Agreement.

6.4.2. Pre-Design Investigations to Upgrade Seepage Barriers and Well Extraction Systems

Upon receipt of EPA's written approval of the Pre-Design Work Plan for Investigations to Upgrade Seepage Barriers and Well Extraction Systems, CMI shall commence the pre-design investigation activities to upgrade the seepage barriers in the area of the 002 and 003 collection systems at the Tailing Facility Area and new well extraction systems at the mouths of the mine side drainages at the Mine Site Area in accordance with the EPA-approved work plan and schedule. CMI shall provide EPA, NMED and MMD a minimum 10-day advance notice of the start of field activities.

6.4.3. Pre-Design Report for Investigations to Upgrade Seepage Barriers and Well Extraction Systems

CMI shall prepare and submit to EPA for approval a draft "Pre-Design Investigations to Upgrade Seepage Barriers and Well Extraction Systems Report" in accordance with the approved schedule. The draft report shall present the information collected to support the detailed designs for upgrading the seepage barriers in the area of the 002 and 003 collection

systems at the Tailing Facility Area and new well extraction systems at the mouths of the mine side drainages at the Mine Site Area.

The draft report shall include without limitation the following:

- Summary of objectives and requirements described in the approved work plan;
- Summary of the Work completed;
- Identification of vendors and equipment used;
- Boring logs and well construction diagrams;
- Analytical data;
- Identification of any design specifications and/or performance criteria to be utilized for the detailed design; and
- Documentation of completion of the Work and the date of completion.

CMI shall revise the draft report to address all EPA comments. The revised report shall be submitted to EPA for approval within 30 days after receipt of EPA comments.

6.5. Pre-Design Borrow Characterization of Spring Gulch Waste Rock

CMI shall conduct a pre-design borrow characterization of the proposed Spring Gulch Waste Rock Pile borrow material to further assess its suitability, when properly amended, as a non-acid generating and non-toxic cover material for the ET cover system. This work shall consist of (1) a field characterization of the Spring Gulch Waste Rock Pile to quantify the volume of waste rock that is non-acid generating and meets the 600 mg/kg molybdenum borrow screening criteria specified in the ROD, (2) an evaluation of amendment/borrow mixtures for achieving water holding capacity, (3) a greenhouse study using amended Spring Gulch waste rock to evaluate plant growth, plant uptake of molybdenum and direct toxicity to plants, and (4) an assessment of toxicity to appropriate animal species through a focused literature review and other studies as appropriate.

6.5.1. Pre-Design Work Plan for Borrow Characterization of Spring Gulch Waste Rock

Within 90 days after the Effective Date of the Agreement, CMI shall prepare and submit to EPA for approval a "Pre-Design Work Plan for Borrow Characterization of Spring Gulch Waste Rock." The work plan shall include those elements specified in Section 6.2.4.1 of this SOW. The work plan shall describe all the tasks to be performed for the studies and include a schedule for completing the tasks. The schedule shall include specific dates for each task and subtask, including the expected review times for EPA. The work plan shall include a description of the proposed additional data to be collected by CMI to further assess the suitability of Spring Gulch waste rock as a non-acid generating borrow source for cover that will support revegetation and provide water holding capacity to levels that will allow the ET cover system to meet performance standards.

Since the chemical and physical properties of the Spring Gulch Waste Rock Pile are heterogeneous, the study shall adequately characterize the spatial variability of the chemical and physical properties of the waste rock to identify portions suitable for use as cover material, with the goal of maximizing the amount of Spring Gulch waste rock that can be used for cover. The characterization shall also include Acid Base Accounting (ABA) tests and the physical and mineralogical tests necessary to determine the potential for acid generation. It will include the concentration and chemical forms of molybdenum within the Spring Gulch Waste Rock Pile.

CMI shall also measure the water holding capacity of Spring Gulch waste rock and then design and test amendment/borrow mixtures to meet the water holding capacity needed for an effective ET cover system. A performance criterion will be developed during the pre-design phase for the ET cover system to achieve the remedial action objectives for the Mine Site Area. This criterion will focus on reducing net percolation through the nonacid generating cover system to a level that would allow attainment of ground water remediation goals and be protective of ground water. The work plan shall provide for the development of the ET cover system performance criterion and submittal of the performance criterion to EPA for approval.

Actual bioavailability of molybdenum shall be verified as part of the greenhouse study to measure molybdenum uptake into plant shoot and root tissues and toxicity effects to plants. The greenhouse study shall also serve to demonstrate the effectiveness of organic and mineral amendments that substantially improve moisture storage characteristics and promote vegetative growth. Edaphic properties of unamended and amended Spring Gulch waste rock will be evaluated by chemical and physical tests, including tests of particle size distribution, water holding capacity and available soil nutrient characteristics. Plant growth responses, molybdenum uptake and toxicity to plants will be compared to unamended controls.

Molybdenum uptake data from the greenhouse study will be further evaluated by a focused literature review and other studies as appropriate to assess molybdenum toxicity to appropriate animal species through herbivory and other routes of exposure.

CMI shall revise the draft work plan to address all EPA comments. The revised work plan shall be submitted to EPA for approval within 45 days after receipt of EPA comments.

Upon EPA approval of the work plan and schedule, they shall become enforceable parts of the Agreement.

6.5.2. Pre-design Borrow Characterization of Spring Gulch Waste Rock

Upon receipt of EPA's written approval of the Pre-Design Work Plan for Borrow Characterization of Spring Gulch Waste Rock, CMI shall commence the borrow characterization, water holding capacity evaluation, greenhouse study, focused literature review and other studies in accordance with the approved work plan and schedule. CMI

shall provide EPA, NMED, and MMD 10-day advance notice of the start of field activities. A detailed field schedule will also be provided 10 days in advance of field activities.

6.5.3. Pre-Design Reports for Borrow Characterization of Spring Gulch Waste Rock

CMI shall prepare and submit to EPA for approval a draft "Pre-Design Spring Gulch Waste Rock Pile Borrow Characterization Study Report" (Borrow Characterization Report) and draft "Pre-Design Spring Gulch Waste Rock Greenhouse Study Report" (Greenhouse Study Report) in accordance with the approved schedule. The results of the water holding capacity evaluation shall be included in the Borrow Characterization Report. The results of the assessment on molybdenum toxicity to specific animal species through the focused literature review and other studies shall be included with the Greenhouse Study Report.

The draft Borrow Characterization Report shall, at a minimum, include all methods, analytical results, an evaluation and interpretation of the data, and an estimation of the salvageable volume of potentially suitable Spring Gulch waste rock that could be used as cover material for the Mine Site Area waste rock piles. As appropriate, the draft report shall include without limitation the following:

- Summary of the study objectives and requirements established in the approved work plan;
- Background, including available information about the construction, past investigations, characterization and uses of the Spring Gulch Waste Rock Pile and materials;
- Identification of limiting criteria and methods to evaluate acid-generating potential and molybdenum form and content;
- Methods used to establish spatial certainty of sampling effort and variance among sample values;
- Maps and graphical representations to depict 3-dimensional sampling locations and isopleths of test results for acid-forming potential, and the total, oxide, and sulfide forms of molybdenum throughout the volume of the Spring Gulch Waste Rock Pile that is proposed for cover material;
- Evaluation of 3-dimensional model for salvageable volume of potentially suitable Spring Gulch waste rock to include descriptions of methods to segregate, salvage and process materials that meet screening criteria for acid-generating potential, and molybdenum content;
- Description of problems or unusual occurrences encountered during the field sampling effort, testing of samples or evaluation of data; and
- Documentation of completion of the borrow characterization study and the date of completion.

The draft Greenhouse Study Report shall include all methods, analytical results, an evaluation and interpretation of the data, an assessment of the suitability of amended

Spring Gulch waste rock in terms of direct toxicity to plants and toxicity to herbivorous animals based on the focused literature review and other studies as appropriate, and water holding capacity. As appropriate, the draft report shall include without limitation the following:

- Summary of the study objectives and requirements established in the approved work plan;
- Background and discussion of appropriate literature reviewed, previous rye grass and earthworm toxicity testing of Spring Gulch material and EPA's development of borrow screening criteria performed as part of the RI/FS, other relevant vegetation studies conducted at the Questa mine as well as literature comparisons of greenhouse studies to field performance for native plants. The literature review, which will not be limited to peer-reviewed articles, will support proposed designs and treatments in test plots and pilot-scale testing and will support studies of amendments to be used within the cover systems for the waste rock piles, cover construction methods, alternative grading, and long-term performance. It will include literature concerning organic and inorganic amendments, cover designs (e.g. moisture storage, erosion, cover depth), and studies of vegetation development at other sites;
- Discussion of methods used to collect and screen Spring Gulch field samples to produce materials for use in the greenhouse study;
- Tables and discussion describing mixtures of amendments with Spring Gulch materials to produce test growth media and the results of amendment treatments compared to requirements established in the approved work plan;
- Discussion of plant materials used, species, accessions and cultivars selected, and propagation methods, if any;
- Tables and discussion of environmental control within the greenhouse environment, including temperature, shading, any supplemental bench heating, irrigation schedules and any pH adjustments, buffers or nutrients added to irrigation water or test growth media;
- Photographs of greenhouse facilities, equipment, spacing and placement of plant containers within the greenhouse facilities and chronological development of plants within each treatment and close-ups of typical plant development and pathology or stress symptoms;
- Tables and discussion relating differences in physical, chemical and hydrologic properties between screened and amended Spring Gulch test media used in the greenhouse study and unscreened field (though amended) Spring Gulch source material that would represent actual field conditions. If a smaller size (screened) fraction of Spring Gulch waste rock is used in the greenhouse study, scaling of greenhouse media to whole field media properties, including volumetric water holding capacity shall be a key component of the report;

- Graphical representation of results and discussion of experimental design and data analysis, including parametric or non-parametric tests, treatment of missing data, and any data transformations; and
- Documentation of completion of the Spring Gulch waste rock greenhouse study (e.g., last measurement taken in greenhouse or last test result received from laboratory) and the date of completion.
- An evaluation of molybdenum exposure and toxicity to appropriate animal species through herbivory and other routes of exposure, based on a focused literature review, plant uptake data obtained from the greenhouse study, and other studies that may be conducted by CMI, as appropriate.

CMI shall revise the draft Borrow Characterization Report and Greenhouse Study Report to address all EPA comments. The revised reports shall be submitted to EPA for approval within 45 days after receipt of EPA comments.

6.6. Remedial Design Options for Waste Rock Piles

CMI will convene a TWG, as described in Section 4.4 of this SOW, to assist CMI in a process for developing and assessing preliminary design options for the waste rock piles. A facilitator will assist the TWG in performing its work. The TWG will consist of experts with expertise in geotechnical engineering, engineering geology, mining/earthworks construction engineering, acid rock drainage geochemistry, and/or hydrology. The stakeholders that will be invited to have an expert participate in the TWG include EPA, NMED, MMD, and other stakeholders as appropriate. CMI will consult with EPA regarding the technical qualifications of proposed experts. The views or opinions stated by the stakeholder experts during the TWG process may not necessarily reflect the position of the stakeholders they represent.

As discussed below, CMI will develop draft proposed design guidelines and parameters; draft preliminary design options (at a conceptual level) for the roadside waste rock piles; and one or more draft preliminary integrated designs (at a conceptual level) for all of the waste rock piles. The TWG will be asked to evaluate and refine the proposed design guidelines and parameters, evaluate and refine the preliminary design options, assess the design options with respect to key design factors, and compare and contrast the relative performance of the design options in relation to each of those factors. As part of this process, the TWG will be asked to evaluate the extent to which the design options can achieve Performance Standards, comply with ARARs, and take into consideration the TBC material set forth in the ROD. Information developed by the TWG may be used by CMI to evaluate the potential availability of a technical basis for modifying a Performance Standard or waiving an ARAR as provided under CERCLA.

The TWG is expected to provide its factual findings and expert input to CMI for consideration in preparing the preliminary design option(s) for the roadside waste rock piles and the preliminary integrated design option(s) for all waste rock piles, including any waste rock repositories that may be needed.

The following subsections define the steps in the early design options assessment process.

6.6.1. Scoping Meeting

Within seven (7) days of the Effective Date of the Agreement, CMI shall send out a letter to the stakeholders referenced in Section 4.4 of this SOW requesting their technical experts' participation in the TWG. The letter should discuss the requirements to participate in the TWG and ask each stakeholder to provide the name of its technical expert to CMI within 30 days. Within 90 days of the Effective Date of the Agreement, CMI shall hold the Scoping Meeting for the TWG. Before the Scoping Meeting, CMI will provide background and reference materials to the TWG. During the Scoping Meeting, CMI, working with the facilitator, will provide an overview of the background materials, the design options assessment process, Performance Standards, ARARs, TBCs and the anticipated schedule.

6.6.2. General Design Guidelines and Options Report

Within 30 days following the Scoping Meeting, CMI shall provide the TWG with a draft "General Design Guidelines and Options Report" that will include draft general design guidelines and parameters that will apply to all of the waste rock piles, including initial definitions of design options that include the principal distinguishing features of each option (such as slopes). CMI shall work with the facilitator to schedule and conduct TWG meetings to discuss, supplement, and refine the draft general design guidelines and parameters, including selection of a range of preliminary design options (at a conceptual level) for further consideration. Based on the findings of the TWG, CMI may revise the draft General Design Guidelines and Options Report.

Within 90 days following the initial submission of the draft General Design Guidelines and Options Report to the TWG, CMI shall submit the draft General Design Guidelines and Options Report to EPA for review. The General Design Guidelines and Options Report shall include the following information:

- Stability requirements (e.g., shallow and deep-seated slope failure mechanisms to be evaluated);
- Design extreme event (e.g., potential triggering mechanisms for slope failures);
- Material properties (e.g., shear strength);
- Ground and surface water evaluations to be included in the assessment; and
- Definition of a limited number of preliminary design options (at a conceptual level) to be evaluated further (with the principal distinguishing features of each design option, such as slopes, included). The design options shall be sufficiently different to compare and contrast meaningfully during assessment. Design options ultimately defined as a result of TWG assessment may include features drawn from different options.

EPA will approve, approve with modifications, or disapprove the General Design Guidelines and Options Report in accordance with the procedures set forth in Section IX of the Agreement (EPA Approval of Plans and Other Submissions). If EPA approves (or approves with modifications) the General Design Guidelines and Options Report, CMI shall initiate the next phase of the assessment process. If EPA disapproves the General Design Guidelines and Options Report, EPA will provide a written explanation to CMI along with the disapproval.

CMI shall revise the General Design Guidelines and Options Report to address all EPA comments. If EPA has disapproved the Report, CMI shall revise the Report and resubmit it to the TWG for further consideration within 30 days after receipt of EPA's disapproval.

6.6.3. Roadside Waste Rock Piles Design Options

Within 90 days of receipt of EPA's written approval (or approval with modifications) of the General Design Guidelines and Options Report, CMI shall provide the TWG with a draft "Roadside Waste Rock Piles Design Options Report" for review. The draft report shall be based on the General Design Guidelines and Options Report and shall contain design concepts for each potential option for the roadside waste rock piles, including the basic engineering approach, quantities, and time periods for activities, calculated factors of safety for completed designs, and a brief outline of any design issues for each option.

CMI shall work with the facilitator to schedule and conduct TWG meetings to discuss, supplement, and refine the draft Roadside Waste Rock Piles Design Options Report.

In addition to reviewing the information in the draft Roadside Waste Rock Piles Design Options Report and discussing, supplementing, and refining the draft design options, the TWG will be asked to evaluate the performance of each design option with respect to key design factors including, but not limited to: slope stability and factor of safety; management of underlying natural slopes; slope angles capable of supporting an ET cover; sustainable vegetation; water management; environmental protection and construction-related environmental impacts; ability to achieve ARARs and TBCs; worker safety; public safety; community impacts; and cost.

CMI will analyze each proposed design option, considering the TWG evaluations: (1) to provide the basis for selecting appropriate slope gradients for each waste rock pile that are consistent with the remedy selected by EPA in the ROD or that include a technical justification for any inconsistency with the ROD; (2) to ensure the design option is protective of human health and the environment and complies with ARARs or includes a justification for one of the ARAR waivers allowable under CERCLA; and (3) to ensure the design option will achieve the performance standards set forth in the ROD, including all Remedial Action Objectives, or include a technical basis for modifying such performance standards. Any request by CMI to modify a Performance Standard, waive an ARAR, or otherwise substantively modify the ROD shall be contained in a separate submission to EPA. EPA shall consider any such request in accordance with CERCLA, the NCP and EPA guidance.

Based on information needs identified during the assessment, the TWG may propose recommendations for, or CMI may identify, pilot studies or testing to test design concepts, methodologies, and design elements. If small-scale pilot studies or tests are identified and agreed to by CMI that could be implemented during the assessment process, CMI may propose such studies or tests, along with preliminary schedules, to EPA for review. If such work and schedules are approved by EPA, EPA may adjust the schedule of deliverables under this SOW to enable such studies or tests to be planned and implemented by CMI and reported to the TWG. Any work plan prepared by CMI for a pilot study or test must be approved by EPA before the pilot study or test can be performed. Additionally, any pilot study or test to be undertaken as part of the assessment process shall be performed in conformance with all Site-specific plans and the Health and Safety Plan required under the Agreement and this SOW.

Based on the results of the TWG's evaluation and the results of any pilot studies or tests completed or any other information developed during the assessment process, CMI may revise its draft Roadside Waste Rock Piles Design Options Report. Within 120 days of submittal of the draft Roadside Waste Rock Piles Design Options Report to the TWG, CMI shall submit the draft Roadside Waste Rock Piles Design Options Report to EPA for review. The information in the Roadside Waste Rock Piles Design Options Report shall inform the preparation of the draft Integrated Waste Rock Pile Conceptual Design Options Report discussed in Section 6.6.4. The Roadside Waste Rock Piles Design Options Report shall include the following information:

- Definitions of the Roadside Waste Rock Piles Design Options;
- A comparative analysis of the Roadside Waste Rock Piles Design Options with respect to the key design factors, including descriptions of key benefits, risks, and trade-offs;
- Sensitivity analysis, as needed;
- Assessment of uncertainties and levels of confidence; and
- Results of any pilot studies that were conducted as part of this evaluation.

EPA will approve, approve with modifications, or disapprove the Roadside Waste Rock Piles Design Options Report in accordance with the procedures set forth in Section IX of the Agreement (EPA Approval of Plans and Other Submissions). If EPA approves (or approves with modifications) the Roadside Waste Rock Piles Design Options Report, CMI will initiate the next phase of the assessment process. If EPA disapproves the Roadside Waste Rock Piles Design Options Report, EPA will provide a written explanation to CMI.

CMI shall revise the Roadside Waste Rock Piles Design Options Report to address all EPA comments. If EPA has disapproved the Report, CMI shall revise the Report and resubmit it to the TWG for further consideration within 30 days after receipt of EPA's disapproval.

6.6.4. Integrated Waste Rock Pile Conceptual Design Options

Within 120 days of receipt of EPA's written approval (or approval with modifications) of the Roadside Waste Rock Piles Design Options Report, CMI shall provide the TWG with a draft "Integrated Waste Rock Pile Conceptual Design Options Report" for review. The draft report shall be based on the Roadside Waste Rock Piles Design Options Report and shall contain a draft preliminary integrated design for all waste rock piles, including any waste rock repositories that are necessary, for evaluation by the TWG.

CMI shall work with the facilitator to schedule and conduct TWG meetings to discuss, supplement, and refine the draft Integrated Waste Rock Pile Conceptual Design Options Report. The TWG will provide the results of its assessment to CMI.

Based on information needs identified during the assessment, the TWG may propose recommendations for, or CMI may identify, pilot studies or testing to test design concepts, methodologies, and design elements, the results of which may be incorporated into the waste rock pile design options. If small-scale pilot studies or tests are identified and agreed to by CMI that could be implemented during the assessment process, CMI may propose such studies or tests along with preliminary schedules to EPA for review. If such work and schedules are approved by EPA, EPA may adjust the schedule of deliverables under this SOW to enable such studies or tests to be planned and implemented by CMI and reported to the TWG. Any work plan prepared by CMI for a pilot study or test must be approved by EPA before the pilot study or test can be performed. Additionally, any pilot study or test to be undertaken as part of the assessment process shall be performed in conformance with all Site-specific plans and the Health and Safety Plan required under the Agreement and this SOW.

Based on the results of the TWG's evaluation and the results of any pilot studies or tests completed or any other information developed during the assessment process, CMI may revise its draft Integrated Waste Rock Pile Conceptual Design Options Report. Within 120 days of submission of the draft Integrated Waste Rock Pile Conceptual Design Options Report to the TWG, CMI shall submit the Integrated Waste Rock Pile Conceptual Design Options Report to EPA for approval. The Integrated Waste Rock Pile Conceptual Design Options Report shall include the following information:

- Definitions of the Integrated Waste Rock Pile Design Options;
- A comparative analysis of the Integrated Waste Rock Pile Design Options with respect to the key design factors, including descriptions of key benefits, risks, and trade-offs, if required;
- Sensitivity analysis, if required;
- Repository siting options, if required; and
- Results of any pilot studies that were conducted as part of this evaluation.

EPA will approve, approve with modifications, or disapprove the Integrated Waste Rock Pile Conceptual Design Options Report in accordance with the procedures set forth in Section IX of the Agreement (EPA Approval of Plans and Other Submissions). If EPA

approves (or approves with modifications) the Integrated Waste Rock Pile Conceptual Design Options Report, CMI will initiate the next phase of the assessment process. If EPA disapproves the Integrated Waste Rock Pile Conceptual Design Options Report, EPA will provide an explanation to CMI.

CMI shall revise the Integrated Waste Rock Pile Conceptual Design Options Report to address all EPA comments. If EPA has disapproved the Report, CMI shall revise the Report and resubmit it to the TWG for further consideration within 30 days after receipt of EPA's disapproval.

6.7. Group 1 Waste Rock Pile Remedial Design Pilot Project

CMI shall conduct a pilot waste rock pile remediation project on the Goathill North Waste Rock Pile to test a range of construction methods, concepts, and specific design elements and criteria at a field scale. The pilot project shall be designed to collect design information during and after construction over a period of approximately 5 to 10 years, in addition to the performance of routine post-construction maintenance and monitoring. The pilot project would include evaluation of grading, cover, and vegetation criteria, for determining how best to achieve the Performance Standards, comply with ARARs, and take into consideration the TBC material set forth in the ROD. This project is considered a pilot project because it is the first waste rock pile to be addressed and information obtained from the project will be used in subsequent waste rock pile remediation designs. The pilot project shall include an examination of the constructability, effectiveness, and practicality of the methods or concepts described in the preliminary design reports to be prepared under Section 6.6 of this SOW. The pilot project shall include, but is not limited to, evaluations of regrading, cover placement, amendment application, and revegetation to a degree that is intended to represent final remediation of the waste rock pile. Cover design parameters to be tested include, but are not limited to, edaphic properties, water holding capacity, percolation, and percent organic matter. The pilot project shall be designed and constructed for complete remediation of the waste rock pile.

The pilot project shall evaluate various cover design parameters and physical properties of borrow materials, while employing a minimal cover depth of three feet as specified in the ROD. The pilot project shall include testing of a range of design parameters, including grain size, grading design, amendment types, application methods and frequency, and revegetation techniques. Monitoring shall be performed to evaluate metals uptake in plant tissue. Any applicable DQOs for the pilot project shall also be documented.

The pilot project shall be designed to determine optimal cover and vegetation design specifications for achieving performance criteria in reducing net percolation, promoting vegetative growth and protecting wildlife, and minimizing erosion and long-term slope maintenance. As provided in Section 6.5.1 of this SOW, a performance criterion will be developed during pre-design for the store and release/ET cover system to achieve the remedial action objectives for the Mine Site Area. The pilot project shall be designed to measure the amount of surface infiltration into and net percolation through the cover

system in order to assess the effectiveness of the various treatments in achieving the performance criterion for infiltration and percolation.

As stated above, the schedule for the pilot project shall include sufficient time (estimated at 5 – 10 years) to evaluate performance and incorporate pilot project results into the remedial design of subsequent waste rock piles. The durations may vary with the concepts being tested; some issues such as constructability would be assessed very quickly, while assessment of vegetation success would take longer.

Following EPA's written acceptance of the Roadside Waste Rock Piles Design Options Report, Pre-Design Spring Gulch Waste Rock Pile Borrow Characterization Study Report, or Group 1 Waste Rock Pile Pre-Design Investigation Report (if performed), whichever is latest, CMI shall commence the design of the Group 1 Waste Rock Pile pilot project, consistent with the ROD, and this SOW. All design plans and specifications shall be developed consistent with EPA's Superfund Remedial Design and Remedial Action Guidance (OSWER Directive No. 9355.0-4A), except as otherwise specified in this SOW or the Pilot Project Work Plan.

6.7.1. Group 1 Waste Rock Pile Pre-Design Investigation

Within 90 days after the Effective Date, CMI shall prepare and submit to EPA a "Goathill North Stability Evaluation Report," containing a summary and evaluation of existing stability data for the Goathill North Waste Rock Pile. The Goathill North Stability Evaluation Report also shall identify any additional information that is required to perform the design of the Group 1 Waste Rock Pile pilot project, and if there is such information needed, describe the pre-design investigation work that is required to obtain such information and propose a schedule for such work.

If pre-design investigation work is required, within 60 days after EPA approval of the Goathill North Stability Evaluation Report, CMI shall prepare and submit to EPA for approval a draft "Group 1 Waste Rock Pile Pre-Design Investigation Work Plan" for the pre-design investigation work identified in the Goathill North Stability Evaluation Report. The work plan shall include those elements specified in Section 6.2.4.1 of this SOW.

CMI shall revise the draft work plan to address all EPA comments. A revised work plan shall be submitted to EPA for approval within 30 days after receipt of EPA comments.

Upon receipt of EPA's written approval of the Group 1 Waste Rock Pile Pre-Design Investigation Work Plan, CMI shall commence the pre-design investigation work in accordance with the approved work plan and schedule. CMI shall provide EPA, NMED, and MMD a minimum 10-day advance notice of the start of field activities. CMI shall provide EPA with updates and progress reports by telephone during any sampling activities.

Following completion of the pre-design investigation, CMI shall prepare and submit to EPA for approval a draft "Group 1 Waste Rock Pile Pre-Design Investigation Report" in

accordance with the EPA-approved schedule. The draft report shall include without limitation the following, as appropriate: a summary of the objectives and requirements described in the approved work plan; a summary of the work completed; analytical results; a summary of any issues and problems encountered during the investigation; results and conclusions; and documentation of completion of the work and the date of completion.

CMI shall revise the draft report to address all EPA comments. The revised report shall be submitted to EPA for approval within 30 days after receipt of EPA comments.

6.7.2. Group 1 Waste Rock Pile Design

The design process for the Group 1 Waste Rock Pile remedial design pilot project shall consist of four stages, as described below: preliminary design, intermediate design, pre-final design, and final design. The final design shall provide sufficient detail to support invitation-to-bid packages for Group 1 Waste Rock Pile pilot project construction. In addition to the Scoping Meeting for the Group 1 Waste Rock Pile Design, CMI, EPA, NMED, and MMD shall meet periodically during each stage of the Group 1 Waste Rock Pile design process to discuss key design elements.

6.7.2.1. Preliminary Design

Within 120 days after receipt of EPA's written acceptance of the Roadside Waste Rock Piles Design Options Report, Pre-Design Spring Gulch Waste Rock Pile Borrow Characterization Study Report, or Group 1 Waste Rock Pile Pre-Design Investigation Report (if performed), whichever is latest, CMI shall submit to EPA a draft "Group 1 Waste Rock Pile Preliminary Design Report," which will initiate the design effort for the preferred design option for the Group 1 Waste Rock Pile. During the preparation of the Group 1 Waste Rock Pile Preliminary Design Report, CMI, EPA, NMED, and MMD shall meet at least monthly to discuss the preliminary design. The preliminary design report shall include or discuss, at a minimum, the following:

- Preliminary plans, drawings, and sketches;
- Preliminary design calculations;
- Results of applicable studies and additional field sampling and analysis, if any, conducted as part of the roadside waste rock piles design options evaluation or the integrated waste rock piles conceptual design options evaluation, or conducted since the Feasibility Study;
- Identification of data gaps, if any;
- Recommendations for additional data collection, if necessary;
- Design basis memorandum, including design assumptions and parameters, design restrictions and performance criteria;
- Outline of technical specifications;
- Preliminary anticipated pilot project monitoring and operation requirements;
- Preliminary construction schedule;

- Identification of potential community impacts; and
- Preliminary design for any waste rock repository(ies) required for pilot project material

If recommendations for additional data collection are made, CMI may propose to collect such data as described in Section 6.2.9 of this SOW.

The design includes various elements of grading, cover, and vegetation. The grading design will include geometry and aerial extent of waste rock piles; interbench placement and interbench slopes; estimated cut and fill volumes of waste rock to be moved to achieve required interbench slopes; and estimated volume of waste rock to be placed in repository(ies), if required. The design basis memorandum will include: identification of Performance Standards, ARARs, pertinent codes and standards, and pertinent TBC material identified in the ROD and discussion of how they will be addressed. Other technical factors of importance to be considered for design and construction will include: use of currently accepted environmental control measures, constructability of the design, use of currently acceptable construction practices and techniques, and use of green remediation practices. During the preliminary design, the potential community impacts will be identified, including potential coordination issues with mining personnel and other coordination issues (*e.g.*, utilities, environmental, community impacts), potential work zone transportation and management strategies, potential work zone impacts, and potential construction and traffic control approaches (*e.g.*, road closures)).

CMI shall address all EPA comments on the draft preliminary design report either in a revised design report submitted to EPA for acceptance within 30 days of receipt of EPA comments, or, upon CMI request and EPA approval, in the draft Intermediate Design Report.

6.7.2.2. Intermediate Design

Within 120 days after receipt of EPA's written acceptance of the Group 1 Waste Rock Pile Preliminary Design Report or EPA's approval of CMI's request to address EPA comments in the draft Intermediate Design Report, CMI shall submit to EPA a draft "Group 1 Waste Rock Pile Intermediate Design Report." The intermediate design report shall include or discuss, at a minimum, the following:

- Refined plans and drawings;
- Refined design calculations;
- Summary of the results of any data collection recommended in the Preliminary Design, or any relevant operational data;
- Updated design basis memorandum, as necessary;
- Refined technical specifications;
- Refined anticipated pilot project monitoring and operation requirements;
- Project schedule for construction and implementation;

- Constructability review; and
- Refined design for any waste rock repository(ies) required for pilot project material.

CMI shall address all EPA comments on the draft Intermediate Design Report in the draft Pre-Final Design Report.

6.7.2.3. Pre-Final Design

Within 90 days after receipt of EPA's comments on the Group 1 Waste Rock Pile Intermediate Design Report, CMI shall develop a draft "Group 1 Waste Rock Pile Pre-Final Design Report," which will provide the design effort at a level sufficient for preparation of bid documents.

The pre-final design report shall include or discuss, at a minimum, the following:

- Draft final drawings, detail drawings, list of materials and quantities;
- Final design calculations;
- Final design assumptions and parameters;
- Draft final technical specifications;
- Updated project schedule for the construction and implementation of the pilot project, identifying timing for initiation and completion of all critical path tasks;
- An Operation and Maintenance ("O&M") Plan for the pilot project; and
- Draft final design for any waste rock repository(ies) required for pilot project material.

CMI shall address all EPA comments on the draft Pre-Final Design Report in the draft Final Design Report.

6.7.2.4. Final Design and Pilot Project Work Plan

Within 30 days after receipt of EPA's comments on the Group 1 Waste Rock Pile Pre-Final Design Report, CMI shall submit a draft "Group 1 Waste Rock Pile Final Design Report and Pilot Project Work Plan." The design documents included in this report will be at a level considered suitable to issue for construction.

The Pilot Project work plan shall describe all the tasks to be performed for the pilot project and include a schedule for completing the tasks. The schedule shall include specific dates for each task and subtask, including the expected review times for EPA. The work plan shall include those elements specified in Section 6.2.4.1 of this SOW.

CMI shall address all EPA comments on the draft Final Design Report and Pilot Project Work Plan within 30 days after receipt of EPA comments.

Upon EPA approval of the Pilot Project Work Plan and schedule, they shall become enforceable parts of the Agreement.

6.7.3. Update Overall Site Plan

CMI shall update and maintain the necessary plans within the Overall Site Plan and the HASP for conducting the pilot project. Within 90 days after receipt of EPA's written acceptance of the Group 1 Waste Rock Pile Final Design Report and Pilot Project Work Plan, CMI shall review the existing plans and submit to EPA updated plans or addenda to plans, as necessary, to conduct the pilot project. The updated plans shall include an updated SAP, QAPP and FSP. Since CMI contractors or subcontractors may prepare their own plans, CMI shall incorporate any plans or procedures received from any of its contractors or subcontractors into the Overall Site Plan. CMI shall revise and update the appropriate plans, as necessary, throughout the pilot project.

6.7.4. Conduct Pilot Project for Group 1 Waste Rock Pile

CMI shall conduct the pilot project for the Group 1 Waste Rock Pile by performing the Work set forth in the Agreement, this SOW, and the EPA-approved Group 1 Waste Rock Pile Final Design Report and Pilot Project Work Plan. CMI shall perform the Work in accordance with the EPA-approved work plan schedule. The pilot project implementation will be broken into two major phases:

- Construction; and
- Monitoring.

6.7.4.1. Construction Phase

The construction phase includes tasks covering the period of major construction activities. Activities which shall be conducted by CMI during this phase of the Early Design Actions include without limitation the following:

6.7.4.1.1. Attend Pre-Construction Meeting

Within 30 days after receipt of EPA's written approval of the Group 1 Waste Rock Pile Final Design Report and Pilot Project Work Plan, CMI shall hold a pre-construction meeting with EPA, NMED, and MMD. Participants at the meetings shall include CMI's Project Coordinator, QA Official(s), and a representative of each of CMI's contractors and subcontractors that will perform the Work. Other participants for the meeting may include local emergency responders to implement the HASP (*e.g.,* police and fire departments), State Department of Transportation officials (for potential road closures or vehicular traffic on state highways), or any other local or State government officials whose presence is appropriate for the nature of the Work to be performed. At the meeting, CMI shall provide participants with a detailed construction schedule that

includes the actual dates for mobilization to the Site and construction start up.

6.7.4.1.2. Advance Notice of Start of Construction

CMI shall provide a 10-day advanced notification of the start of the pilot project field activities to EPA, NMED, MMD and all other participants at the pre-construction meeting.

6.7.4.1.3. Construct Pilot Project

Within 30 days after conducting the pre-construction meeting, or as otherwise provided in the approved schedule, CMI shall commence field construction activities in accordance with Section 6.2.7.4 of this SOW.

6.7.4.1.4. Mobilization and Demobilization

CMI shall provide the necessary personnel, equipment, and materials for mobilization and demobilization to and from the Site for the purpose of performing the pilot project, including all required field testing, confirmatory sampling and performance and environmental monitoring. The following mobilization and demobilization Work shall be performed:

- identify field support equipment, supplies and facilities;
- mobilization;
- site preparation;
- installation of utilities;
- construction of temporary utilities; and
- demobilization.

6.7.4.1.5. Provide Site Access

CMI shall provide EPA, NMED, MMD and other regulatory officials and their designated representatives with access to the Site, including all property owned or controlled by CMI and utilized by CMI in carrying out the Work, as provided in Section X of the Agreement (Access to the Site and Other Property).

6.7.4.1.6. Maintain Field Logs and Daily Records

CMI shall maintain field logs and daily records documenting activities occurring in the field during construction as specified in Section 6.2.7.2.4 of this SOW.

6.7.4.1.7. Pre-final Construction Inspection

CMI shall schedule and conduct a pre-final construction inspection of the Group 1 Waste Rock Pile pilot project with EPA, NMED, and MMD. CMI shall develop a punch list of any deficiencies as part of the pre-final construction inspection.

Within 30 days after conducting the pre-final construction inspection, CMI shall prepare and submit to EPA a pre-final construction inspection report which includes the list of deficiencies and completion dates for outstanding items, and the proposed date for a final construction inspection. The date for final construction inspection shall be scheduled within 14 days after completion of the corrective measures.

6.7.4.1.8. Corrective Measures to Address Deficiencies

CMI shall perform corrective measures to adequately address all deficiencies identified on the punch list in accordance with the EPA-approved schedules included with the pre-final construction inspection report.

6.7.4.1.9. Final Construction Inspection

CMI shall conduct a final construction inspection for the pilot project with EPA, NMED, and MMD. The final construction inspection shall consist of a walk-through of the project to determine the completeness of the pilot project construction and its consistency with the EPA-approved Group 1 Waste Rock Pile Final Design Report and Pilot Project Work Plan, the ROD, the Agreement, and this SOW. The inspection will also be used to determine if all punch list items have been adequately addressed. Based on the final construction inspection, CMI shall provide written notification that all field construction activities have been completed in accordance with the EPA-approved work plan and the date such work was completed. The written notification shall be submitted to EPA within 14 days of the final construction inspection, unless otherwise agreed to in writing.

6.7.4.1.10. Final Pilot Project Construction Completion Report

Within 60 days after the final construction inspection, CMI shall prepare and submit to EPA for approval a draft "Final Pilot Project Construction Completion Report." The final construction completion report shall include without limitation the following elements:

- Background;
- Chronology of the pilot project construction;
- Pertinent Performance Standards and construction quality control;

- Pertinent ARARs and TBC material;
- Construction activities;
- As-built drawings that are certified by professional engineer licensed in the State of New Mexico;
- Final inspection documentation and date;
- Summary of project costs;
- Evaluation of construction methodology;
- Observations and lessons learned; and
- Contact information for key CMI and contractor personnel.

CMI shall make revisions to the pilot project construction completion report consistent with EPA's comments. The revised report shall be submitted to EPA for approval within 30 days after receipt of EPA comments or the time period determined by EPA.

6.7.4.2. Monitoring Phase

The monitoring phase includes tasks covering the period of monitoring subsequent to the completion of major construction. Activities which shall be conducted by CMI during this phase of the Early Design Actions include without limitation the following:

6.7.4.2.1. Data Acquisition, Analysis, Validation and Evaluation

CMI shall perform all sample acquisition, field testing and performance monitoring for the pilot project in conformance with the updated SAP, QAPP, FSP and EPA-approved work plan required under the Agreement and this SOW.

6.7.4.2.2. Performance Monitoring

Within 60 days after receiving EPA's written approval of the Group 1 Waste Rock Pile Final Design Report and Pilot Project Work Plan, CMI shall prepare and submit to EPA for approval a draft "Pilot Project Performance Monitoring Plan." The monitoring plan shall be designed to measure the amount of infiltration into and net percolation through the non-acid generating pilot cover systems as well as erosion and sediment production from covered surfaces. The plan shall also be designed to assess the degree of metals uptake in plant tissue and vigor of plant growth. The plan also may include measurements of geotechnical performance and other performance measures proposed by CMI. Collectively, these assessments of hydraulic properties, erosion and vegetation will serve to verify the attainment of the Performance Standards and ARARs for the portion of the pilot project that includes store and release/ET cover systems.

CMI shall revise the draft monitoring plan to address all EPA comments. The revised monitoring plan shall be submitted to EPA for approval within 30 days after receipt of EPA comments or the time period determined by EPA.

Within 30 day after receiving EPA's written approval of the monitoring plan, CMI shall monitor the performance of the Group 1 Waste Rock Pile pilot project, in accordance with the plan.

6.7.4.2.3. Operation and Maintenance of Pilot Project

After construction is completed, CMI shall perform O&M of the pilot project pursuant to the O&M Plan until the date ten years after EPA approval of the Final Pilot Project Construction Completion Report or until the date of EPA approval of the Pilot Project Completion Report described in Section 6.7.4.2.8 of this SOW, whichever is earlier. EPA may require additional O&M of the pilot project as part of a Remedial Action outside of this SOW.

If EPA, the State, and CMI execute and the Court enters a Consent Decree for remedial design and remedial action at the Site, the O&M requirements set forth in the Consent Decree shall supersede the O&M requirements in Section 6.7.4.2.3 of this SOW.

6.7.4.2.4. Quarterly Inspections

CMI shall conduct quarterly inspections of the constructed pilot project with EPA, NMED, and MMD, subject to refinement of this schedule in the Pilot Project Performance Monitoring Plan. CMI may propose to reduce the inspection frequency over time based on the data collected. CMI shall develop a punch list of deficiencies or recommended modifications or adjustments to the pilot project as part of the quarterly inspections. CMI shall prepare and submit to EPA an inspection report which documents the inspection, the participants, all observations and list of deficiencies or modifications which require corrective measures. The quarterly inspection report shall be submitted within 14 days after each inspection. Any significant modifications which are recommended by CMI in the inspection reports, or directed by EPA, which requires additional planning, shall also be documented in the annual assessment reports described in the following section of this SOW.

6.7.4.2.5. Annual Monitoring and Assessment Reports for Pilot Project

CMI shall prepare and submit to EPA an "Annual Monitoring and Assessment Report for the Group 1 Waste Rock Pile Pilot Project" one year following CMI's notification pursuant to Section 6.7.4.1.9 and annually thereafter for each year that the pilot project is ongoing. The annual assessment reports shall document all testing and monitoring of the constructability and effectiveness of the designs, as well as the performance of the cover with regards to erosion, fate of applied amendments and vegetation elements of the store and release/ET cover system. As stated above, the time period for conducting the Pilot Project is approximately 5 – 10 years, which is the estimated amount of time necessary to adequately evaluate vegetation performance. The annual assessment reports shall assess whether the pilot project is performing as designed. The data collected from the pilot project monitoring shall be utilized to verify system performance.

The annual assessment reports shall also include plans for any recommended modifications or adjustments made by CMI or required by EPA based on performance monitoring and testing (*e.g.*, additional application of organic amendments following cover placement) and a schedule for implementing the modification or adjustments.

CMI shall revise the annual assessment report to address all EPA comments. The revised annual report shall be submitted to EPA for approval within 30 days after receipt of EPA comments or the time period determined by EPA.

6.7.4.2.6. Modifications to Pilot Project

Upon receiving EPA's acceptance of any recommended modification or adjustment to the ongoing pilot project or EPA's direction for modification, CMI shall implement the modifications in accordance with the EPA-approved schedules contained in the annual assessment reports required in the previous section of this SOW.

6.7.4.2.7. Provide Site Access

CMI shall provide EPA, NMED, MMD and other regulatory officials and their designated representatives with access to the Site, including all property owned or controlled by CMI and utilized by CMI in carrying out the Work, as provided in Section X of the Agreement (Access to the Site and Other Property).

6.7.4.2.8. Pilot Project Completion Report

Ten years after EPA's approval of the Final Pilot Project Construction Completion Report, or at such earlier time that CMI and EPA agree that CMI has collected enough data from the pilot project to adequately evaluate the performance of the pilot project, CMI shall prepare and submit to EPA for approval a draft "Pilot Project Completion Report" summarizing and evaluating the data collected during the pilot project and evaluating the performance of the elements of the pilot project. The completion report shall include without limitation the following elements:

- Summary of monitoring results;
- Pertinent ARARs and TBC material;
- Evaluation of water management systems;
- Evaluation of long term stability;
- Evaluation of erosion;
- Evaluation of cover performance;
- Operations and maintenance requirements;
- Evaluation of vegetation design performance;
- Summary of lessons learned; and
- Identification of optimal design specifications and performance criteria to be utilized in subsequent waste rock pile designs.

CMI shall make revisions to the pilot project completion report consistent with EPA's comments. The revised report shall be submitted to EPA for approval within 30 days after receipt of EPA comments. EPA approval of the Pilot Project Completion Report shall not be unreasonably delayed.

6.8. Pre-Design Treatability Studies for Water Treatment

CMI shall conduct treatability studies as Early Design Actions to test and evaluate the performance of water treatment technologies outlined in the ROD. Such testing shall provide verification that the chosen treatment technologies selected in the ROD are appropriate for the waste streams to be generated at the Site. The studies shall test the treatability of contaminated water from the mine site and the tailing facility. The testing shall be in a manner that provides accurate and reliable information regarding chemical reagent consumption and sludge volume generation. The testing shall be precise, accurate and scalable to provide design specifications for properly sizing the waste water treatment plant, including without limitation chemical feeding systems, primary and secondary reaction tank sizes, flocculation and thickener tank sizes, sludge holding tanks and filter press or other sludge dewatering devise specifications.

Laboratory screening is used to establish the validity of a technology to treat waste. Bench-scale testing is used to identify the performance of the technology specific to the type of waste or waste water being treated. Pilot-scale testing is used to provide quantitative performance, cost, and design information for remediation. *See* EPA Fact Sheet, *Guide for Conducting Treatability Studies under CERCLA*, November, 1993.

CMI shall perform the following treatability study activities:

6.8.1. Summary of Existing Data and Testing, and Literature Search

Within 60 days after the Effective Date of the Agreement, CMI shall prepare and submit to EPA a "Summary of Existing Data and Testing," containing a summary of existing water treatability testing data and evaluations, and incorporating the results of a comprehensive literature search, not limited to peer-reviewed articles, which support proposed designs and treatments in treatability studies at bench-scale and pilot-scale testing.

6.8.2. Prepare Treatability Study Work Plan

Within 90 days after EPA approval of the Summary of Existing Data and Testing, CMI shall prepare and submit to EPA for approval a "Treatability Study Work Plan for Water Treatment." The treatability study work plan shall include those elements specified in Section 6.2.4.1 of this SOW. The treatability study work plan shall describe the water treatment technologies and design parameters to be tested, test objectives, test equipment and systems, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety procedures, and residual waste management. The DQOs for the treatability studies shall also be documented.

The treatability study work plan shall describe in detail the treatment processes and how the proposed technologies will achieve Performance Standards and ARARs. The treatability study work plan shall address how CMI would meet all discharge or disposal requirements for any and all treated material, air, water, and expected effluents, including NPDES permitting requirements for treated effluent discharges to the Red River. Additionally, the work plan shall include a proposal for final treatment and disposal of all waste material generated by the proposed treatment system.

The Final FS Report (Revision 3) provides a conceptual evaluation of water treatment through use of two different technology systems: (1) a lime high-density sludge (HDS) primary treatment process, including reverse osmosis as a secondary polishing step (if needed) for the Mine Site Area, and (2) an ion exchange primary treatment process with a secondary reverse osmosis polishing step (if needed) for the Tailing Facility Area to meet the Performance Standards at the locations where treated effluent is discharged.

The work plan shall address both treatment systems, among other technologies. The work plan shall address water flow and chemistry of all water sources collected as part of the Selected Remedy. The work plan shall also address long-term performance of the water

treatment systems, the need for and scope of treated effluent polishing steps to meet Performance Standards, and disposal of treatment residuals (including without limitations lime sludge, depleted resin, scale, and brine).

The work plan shall address, among other technologies, treatment systems that consist of conventional (off-the-shelf) and readily available components that are proven capable of treating the COCs within the influent water stream and that can be designed and constructed within the timeframes set forth in the ROD or as established through the NPDES permitting process.

A proposed schedule for performing treatability studies shall be included with the work plan. The schedule shall include specific dates for each task and subtask, including the expected review times for EPA.

CMI shall revise the draft work plan to address all EPA comments. The revised work plan shall be submitted to EPA for approval within 45 days after receipt of EPA comments.

Upon EPA approval of the work plan and schedule, they shall become enforceable parts of the Agreement.

6.8.3. Bench Tests, Pilot-Scale Tests, Field Tests

Within 30 days after receiving EPA's approval of the treatability study work plan, CMI shall commence bench tests, pilot-scale tests and/or field tests for water treatment as provided in the work plan. The Work shall be performed in accordance with the Agreement, this SOW, and the final EPA-approved work plan and schedule. CMI shall conduct such tests to determine whether the remediation technologies can achieve the Performance Standards.

Activities which shall be conducted by CMI during this phase of the Early Design Actions include without limitation the following:

- Procure or construct test facility and procure equipment;
- Identify vendor(s) and analytical services;
- Test equipment to ensure operation, then start up and operate equipment;
- Obtain samples for testing as specified in the EPA-approved treatability study work plan;
- Establish a laboratory to facilitate fast-turnaround analysis of test samples; and
- Characterize and dispose of residuals (*e.g.,* sludge, spent resin, scale and brine), in accordance with law.

6.8.4. Data Acquisition, Analysis, Validation and Evaluation

CMI shall perform all sample acquisition and field testing for the treatability studies in conformance with the updated SAP, QAPP, FSP and EPA-approved work plan required under the Agreement and this SOW.

6.8.5. Treatability Study Evaluation Report

Within 60 days of completion of all bench-scale, pilot-scale and field testing, CMI shall prepare and submit to EPA for approval a draft "Treatability Study Evaluation Report for Water Treatment" that describes the performance of the water treatment technologies tested. The report shall clearly indicate the performance of the technologies compared with the Performance Standards and ARARs established in the ROD, the Agreement and this SOW. The report shall evaluate the effectiveness of the treatment technologies, implementability, cost, and final results compared with the predicted results. The report shall also evaluate full-scale application of the technologies, including sensitivity analysis identifying the key parameters affecting full-scale operation.

CMI shall revise the draft report to address all EPA comments. The revised report shall be submitted to EPA for approval within 30 days after receipt of EPA comments.

The report shall include without limitation the following elements:

- Background;
- Chronology of treatability study activities;
- Performance Standards and construction quality control;
- Pertinent ARARs and TBC material;
- Summary of bench tests, pilot tests and field tests results;
- Identification of optimal design specifications and performance criteria to be utilized in design of water treatment plants;
- Certification of completion of treatability studies;
- Observations and lessons learned; and
- Contact information for key CMI and contractor personnel.

ATTACHMENT 1
SUMMARY OF MAJOR DELIVERABLES FOR EARLY DESIGN ACTIONS
CHEVRON QUESTA MINE SUPERFUND SITE

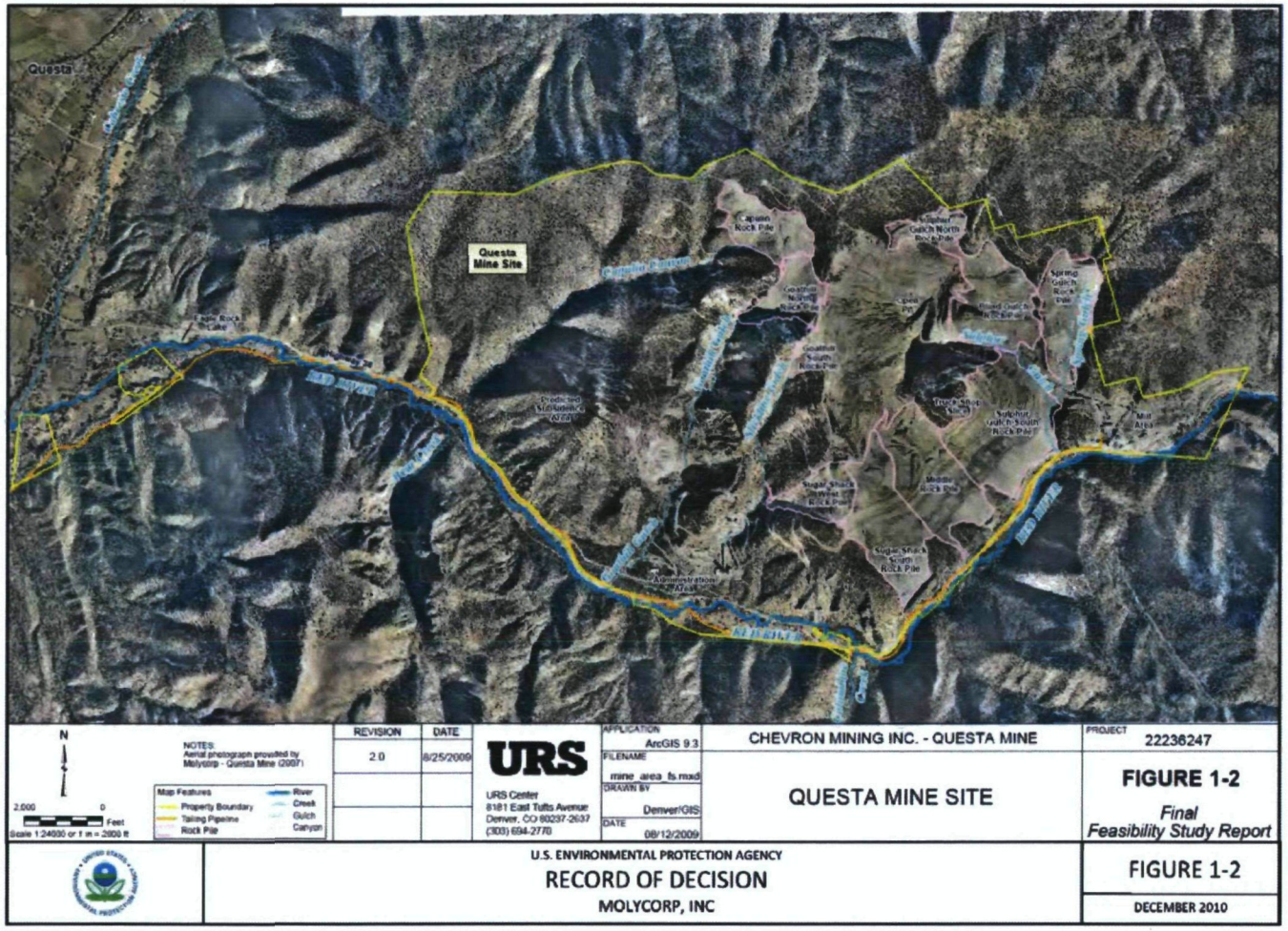
SOW Section	Deliverable	Due Date
	Notification of Project Coordinator Designation	5 days after Effective Date of Agreement
	Notification of Names and Qualifications of Contractor(s) and Subcontractors Retained to Perform the Work	10 days after Effective Date of Agreement
6.1.4	Weekly Communication Report	5 workings days from meeting/conversation
6.1.5	Monthly Progress Report	Beginning on the 10th day in the month following entry of the Agreement and ending with the month following EPA approval of the Final Pilot Project Completion Report
6.1.6	Meeting Results	5 working days following meeting
6.2.6	Early Design Actions Project Schedule	30 days after Effective Date of Agreement
6.2.7	Overall Site Plan – Draft	90 days after Effective Date of Agreement
	Overall Site Plan – Final	30 days after receipt of EPA comments
6.2.7.1	Site Management Plan – Draft	90 days after Effective Date of Agreement
	Site Management Plan – Final	30 days after receipt of EPA comments
6.2.7.2	Sampling and Analysis Plan – Draft	90 days after Effective Date of Agreement
	Sampling and Analysis Plan – Final	30 days after receipt of EPA comments
6.2.7.3	Contingency Plan – Draft	90 days after Effective Date of Agreement
	Contingency Plan – Final	30 days after receipt of EPA comments
6.2.7.4	Construction Quality Assurance Plan – Draft	90 days after Effective Date of Agreement
	Construction Quality Assurance Plan – Final	30 days after receipt of EPA comments
6.2.8	Health and Safety Plan	30 days after Effective Date of Agreement
6.3.1	Pre-Design Work Plan for the Ground Water Investigation at the Tailing Facility Area – Draft	90 days after Effective Date of Agreement
	Pre-Design Work Plan for the Ground Water Investigation at the Tailing Facility Area – Final	30 days after receipt of EPA comments
6.3.3	Pre-Design Ground Water Investigation at the Tailing Facility Area Report – Draft	Per project schedule
	Pre-Design Ground Water Investigation at the	30 days after receipt of EPA comments

	Tailing Facility Area Report – Final	
6.4.1	Pre-Design Work Plan for Investigations to Upgrade Seepage Barriers and Well Extraction Systems – Draft	90 days after effective date of Agreement
	Pre-Design Work Plan for Investigations to Upgrade Seepage Barriers and Well Extraction Systems – Final	30 days after receipt of EPA comments
6.4.3	Pre-Design Investigations to Upgrade Seepage Barriers and Well Extraction Systems Report – Draft	Per project schedule
	Pre-Design Investigations to Upgrade Seepage Barriers and Well Extraction Systems Report – Final	30 days after receipt of EPA comments
6.5.1	Pre-Design Work Plan for Borrow Characterization of Spring Gulch Waste Rock – Draft	90 days after effective date of Agreement
	Pre-Design Work Plan for Borrow Characterization of Spring Gulch Waste Rock – Final	45 days after receipt of EPA comments
6.5.3	Pre-Design Spring Gulch Waste Rock Pile Borrow Characterization Study Report – Draft	Per project schedule
	Pre-Design Spring Gulch Waste Rock Pile Borrow Characterization Study Report – Final	45 days after receipt of EPA comments
6.5.3	Pre-Design Spring Gulch Waste Rock Greenhouse Study Report – Draft	Per project schedule
	Pre-Design Spring Gulch Waste Rock Greenhouse Study Report – Final	45 days after receipt of EPA comments
6.6.2	General Design Guidelines and Options Report – Draft	90 days after submission to TWG
6.6.3	Roadside Waste Rock Piles Design Options Report – Draft	120 days after submission to TWG
6.6.4	Integrated Waste Rock Pile Conceptual Design Options Report – Draft	120 days after submission to TWG
6.7.1	Goathill North Stability Evaluation Report	90 days after Effective Date of Agreement
6.7.1	If Pre-Design Investigation Work Is Required:	
	Group 1 Waste Rock Pile Pre-Design Investigation Work Plan – Draft	60 days after EPA approval of Goathill North Stability Evaluation Report
	Group 1 Waste Rock Pile Pre-Design Investigation Work Plan – Final	30 days after receipt of EPA comments
	Group 1 Waste Rock Pile Pre-Design Investigation Report – Draft	Per project schedule
	Group 1 Waste Rock Pile Pre-Design Investigation Report – Final	30 days after receipt of EPA comments

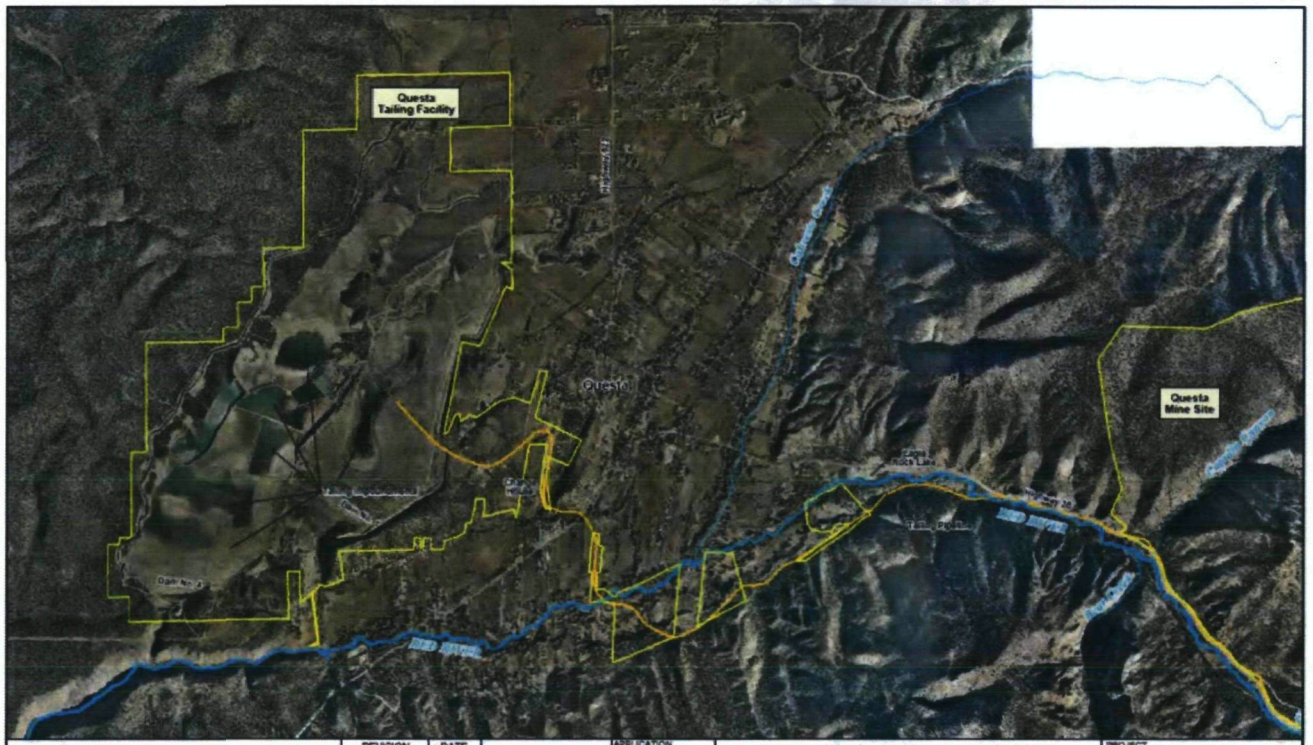
6.7.2.1	Group 1 Waste Rock Pile Preliminary Design Report – Draft	120 days after receipt of EPA's written acceptance of the Roadside Waste Rock Piles Design Options Report, Pre-Design Spring Gulch Waste Rock Pile Borrow Characterization Study Report, or Group 1 Waste Rock Pile Pre-Design Investigation Report (if performed), whichever is latest
	Group 1 Waste Rock Pile Preliminary Design Report – Revised (unless CMI requests and EPA approves addressing EPA comments in draft Intermediate Design Report)	30 days after receipt of EPA comments
6.7.2.2	Group 1 Waste Rock Pile Intermediate Design Report – Draft	120 days after receipt of EPA's written acceptance of Group 1 Waste Rock Pile Preliminary Design Report or EPA's approval of CMI's request to address EPA comments in the draft Intermediate Design Report
6.7.2.3	Group 1 Waste Rock Pile Pre-Final Design Report – Draft	90 days after receipt of EPA's comments on the Group 1 Waste Rock Pile Intermediate Design Report
6.7.2.4	Group 1 Waste Rock Pile Final Design Report and Pilot Project Work Plan – Draft	30 days after receipt of EPA's comments on the Group 1 Waste Rock Pile Pre-Final Design Report
	Group 1 Waste Rock Pile Final Design Report and Pilot Project Work Plan – Final	30 days after receipt of EPA comments
6.7.3	Updated Overall Site Plan (including updated SAP, QAPP, FSP) and HASP	90 days after receipt of EPA's written acceptance of Group 1 Waste Rock Pile Final Design Report and Pilot Project Work Plan
6.7.4.1.7	Pre-Final Construction Inspection Report	30 days after conducting pre-final construction inspection
6.7.4.1.9	Notification that all field construction activities have been completed in accordance with the EPA-approved work plan	14 days after the final construction inspection, unless otherwise agreed to in writing
6.7.4.1.10	Final Pilot Project Construction Completion Report – Draft	60 days after final construction inspection
	Final Pilot Project Construction Completion Report – Final	30 days after receipt of EPA comments
6.7.4.2.2	Pilot Project Performance Monitoring Plan – Draft	60 days after receiving EPA's written approval of Group 1 Waste Rock Pile Final Design Report and Pilot Project Work Plan
	Pilot Project Performance Monitoring Plan – Final	30 days after receipt of EPA comments
6.7.4.2.4	Pilot Project Quarterly Inspection Reports	14 days after each inspection

6.7.4.2.5	Annual Monitoring and Assessment Report for the Group 1 Waste Rock Pile Pilot Project – Draft	One year following CMI's notification pursuant to Section 6.7.4.1.9 and annually thereafter
	Annual Monitoring and Assessment Report for the Group 1 Waste Rock Pile Pilot Project – Final	30 days after receipt of EPA comments
6.7.4.2.8	Pilot Project Completion Report – Draft	10 years after EPA approval of Final Pilot Project Construction Completion Report, or such earlier time that CMI and EPA agree
	Pilot Project Completion Report – Final	30 days after receipt of EPA comments
6.8.1	Summary of Existing Data and Testing	60 days after Effective date of Agreement
6.8.2	Treatability Study Work Plan for Water Treatment – Draft	90 days after EPA approval of Summary of Existing Data and Testing
	Treatability Study Work Plan for Water Treatment – Final	45 days after receipt of EPA comments
6.8.5	Treatability Study Evaluation Report for Water Treatment – Draft	60 days after completion of all bench-scale, pilot-scale and field testing
	Treatability Study Evaluation Report for Water Treatment – Final	30 days after receipt of EPA comments

ATTACHMENT 2



ATTACHMENT 3



Routing and Concurrence Slip	Begin Routing Date: 09/18/2012
Routing Status:	High

To: (Name, office symbol, route number, building, Agency/Post	Initials	Date
1. Gary Baumgarten /s Cathy Gilmore	CG	09/18/2012
2. Cathy Gilmore	CG	09/18/2012
3. Charles Faultry	CF	09/18/2012
4. Elizabeth Pletan	EP	09/19/2012
5. Mark Peycke	MP	09/19/2012
6. Lydia Johnson	LJ	09/21/2012
7. Ben Banipal	BB	09/24/2012
8. Kevin Shade	KS	09/24/2012
9. Deborah Greenwell	DG	09/24/2012
10. Pam Phillips	CP	9/25/12
11.		

Office:	☐ Superfund Division - Front Office
Tracking Category:	☐ Administrative Order on Consent
Enforcement Confidential:	○ Yes ● No
Email Subject:	Chevron Questa Mine - Early Design AOC e-Routing Concurrence
Due Date:	09/25/2012
DD/DDD Assigned:	
DD/DDD Status:	Pending
DD/DDD Remarks:	
Front Office Assigned:	

2002-6769

☐ Action	☐ Coordination	☐ Justify	☐ Signature
☐ Approval	☐ File	☐ Note and Return	☐ AD Signature
☐ As Requested	☐ For Clearance	☐ Per Conversation	☒ DD/DDD Signature
☐ Circulate	☐ For Correction	☐ Prepare Reply	☐ RA Signature
☐ Comment	☐ For Your Information	☒ Review	
☒ Concurrence	☐ Investigation	☐ See Me	

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Kevin Shade	**Phone Number:** 214.665.2708

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For Signature : Choose EDIT document	- CMI_EarlyDesign_AOC_Final_09182012.pdf
Inquiry/Supporting Documents:	- CMI_EarlyDesign_SOW_Final_09182012.pdf
Final Document(s):	

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